The Cocaine Habit.
See page 341.

BOSTON MEDICAL LIBRARY IN THE FRANCIS A. COUNTWAY LIBRARY OF MEDICINE

HEALTH

A WEEKLY JOURNAL OF

DOMESTIC AND SANITARY SCIENCE.

"Reason's whole pleasure—all the joys of sense—
Lie in three words, HEALTH, PEACE, and COMPETENCE."—*Pope.*

EDITED BY DR. ANDREW WILSON, F.R.S.E. &c.

VOL. XIII.—No. 334. FRIDAY, AUGUST 30, 1889. [PRICE TWOPENCE.

PROTECTION FROM FIRE.

Bryant & May's

Safety Matches

PATENT 16 PRIZE MEDALS.

Contain no Phosphorus. Are not Poisonous. Harmless to those employed in their manufacture.

PROTECTION TO HEALTH. SOLD EVERYWHERE.

SPECIAL NOTICE.

INMAN'S COMPOUND SYRUP OF THE HYPOPHOSPHITES.

A Tonic Syrup of wonderful Strengthening and Invigorating Properties.

INMAN'S SYRUP is composed of the Hypophosphites of Lime, Iron, Soda, and Potash, and valuable Tonic Alkaloids, combined so as to be readily assimilated by the Human System. It is a safe and sure Remedy for Nervous Prostration and General Debility, whether the result of Overwork, Mental Anxiety, or Excesses. There is no Medicine that has a more beneficial action upon a debilitated constitution. It stimulates, strengthens, and invigorates the system, and effectually removes the distressing feelings of Nervous Exhaustion. It is suited to both sexes and to all ages. For Delicate Females, and particularly those suffering from impoverished blood, it is invaluable.

HEALTH says:—"We find it to be an excellent preparation, containing all the necessary constituents for that restoration of Nervous Strength which is so essential to the successful treatment of Wasting or Debilitating Diseases. The curative properties of the Hypophosphites in affections of the Respiratory Organs have been permanently established, and in all forms of Nervous Debility their action is marked and certain. The admirable Tonic nature of this Syrup has long been recognized by the Medical Profession, and we can confidently recommend it as a Powerful Invigorator of the Nervous System."

Sold in bottles at 2s. 6d. and 4s. 6d. (post free), and the Proprietors are willing to send a Sample Bottle to any one sending Three Stamps to cover cost of postage.

LONDON AGENTS: BUTLER & CRISPE; TAYLOR'S DRUG COMPANY; F. NEWBERY & SONS.
Proprietors: WILLIAM INMAN & CO. (LIMITED), The London Drug Stores, 8, Shandwick-place, and 46, Leith-street, EDINBURGH.

SCHWEITZER'S

COCOATINA.

GUARANTEED PURE SOLUBLE COCOA.

This Old-Established Article retains its position as "the finest Cocoa in the Market." It is unequalled in purity and flavour, and is very Economical. It will bear the strictest Chemical test, and keeps for years in all Climates.

THE BEST AND PUREST COCOA. SOLD BY GROCERS, CHEMISTS, &c.

ROWNTREE'S

Characterized by PURITY, EXTRAORDINARY STRENGTH and DELICACY of FLAVOUR.

"ELECT" COCOA.

Is very ECONOMICAL, as 1 lb. will make over 120 cups of most DELICIOUS COCOA.

Highly commended by the *Lancet, British Medical Journal, Medical Press, Medical Record, Hospital Gazette, Illustrated Medical News,* and other influential organs; also, by many of the Faculty, and Drs. HASSALL and CLAYTON, and other analysts.

YORK, ENGLAND.

Nos. 1-156 (excepting Nos. 29, 30, 38 and 39) may still be had, price 4d. each.
Nos. 157 (excepting Nos. 245 and 272) to date, price 2d. each.

[Indexes to Vols. II., VI., VII., VIII., IX., X., XI., XII. can be had price 2d. each.

THE

NEBULIZER

(BY ROYAL LETTERS PATENT.)

BY THE AID of this Invention any liquid remedy can be instantaneously converted into a nebula or vapour so extremely delicate and dry that it remains suspended in the air like smoke or fog, and can be inhaled into the lungs as readily as the air itself. This process of transformation is accomplished by simple mechanical means, and does not change in the least degree the nature or strength of the remedy employed.

From the very beginning of the inhalations of appropriate remedies in a nebulized form the breathing becomes easier, expectoration is promoted, the bronchial tubes become free, patients are able to lie down and sleep quietly, and in time a permanent cure is effected. Patients suffering for thirty years and more from asthma in its most distressing form have in this way been entirely and permanently cured after hope had been abandoned.

Successfully used in cases of—

DIPHTHERIA.	HAY ASTHMA.
CROUP.	CHRONIC BRONCHITIS.
PHTHISIS.	CATARRH.
CHRONIC RHINORRHEA.	ASTHMA.

LEUCORRHŒA, &c.

Copy of Testimonial from Dr. GEORGE HENTY, M.D., M.R.C.S., Hon. Sec. N. Dist. Metrop. Cos. Brit. Med. Assoc.—

302, CAMDEN-ROAD, LONDON, N.

DEAR SIR,—

I have great pleasure in giving my testimony in favour of your "Nebulizer," which I have used in cases of Bronchitis and Phthisis Pulmonaris. The Patients all express themselves much benefited by its use, and the ease with which the inhalation is realized is much in its favour.

For antiseptic purposes, when charged with Iodine, Carbolic Acid, Eucalyptus Oil, Terebene, and other remedies, it is certainly the best apparatus I have yet used.

I am of opinion that medical men have not as yet used inhalation sufficiently in all cases of disease of the Respiratory Organs, because of the difficulty of finding a good and easy method of doing so, and that this "Nebulizer" gives this advantage is evident to any one who once tries its use.

I remain, dear Sir,
Yours faithfully,
(Signed) GEORGE HENTY, M.D.

Members of the Medical Profession are cordially invited to investigate this highly useful invention.

Sold complete, with twelve recipes gathered from the practice of eminent Physicians, at 10s. 6d. each, by

A. E. HOLT (Sole Proprietor),
74, FLEET-STREET, LONDON, E.C.
Descriptive Circulars free on application.

GOUT, RHEUMATISM, SCIATICA, AND GOUTY ECZEMA,
DRINK
PITKEATHLY CUM LITHIA,
The only Rational Treatment in Use.

Sold by Chemists, Mineral Water Dealers, and Wine Merchants.
Sole Proprietors: REID & DONALD, PERTH.
London Agents: BEST & SONS, 22, Henrietta-street, Cavendish-sq., W.

ROWLAND'S ODONTO

Known for sixty years to be the best and purest Tooth Powder, as it contains no acid or gritty substances, which ruin the Teeth and produce premature decay; it

WHITENS the TEETH

prevents and arrests decay, strengthens the gums, and gives a pleasing fragrance to the breath. The genuine ODONTO is ROWLAND'S of

20, HATTON-GARDEN, LONDON.

TRELOAR'S CHEVIOT CARPETS

Are made and kept in Stock in the following Sizes, in all Colourings,

ALL WOOL, FRINGED, AND BORDERED:—

SIZE.	PRICE.
9 ft. 0 in. by 7 ft. 0 in.	£1 1 0
9 ft. 3 in. ,, 8 ft. 3 in.	1 5 6
10 ft. 3 in. ,, 8 ft. 3 in.	1 8 0
10 ft. 9 in. ,, 9 ft. 9 in.	1 16 0
11 ft. 3 in. ,, 8 ft. 3 in.	1 14 6
11 ft. 9 in. ,, 9 ft. 9 in.	1 18 0
12 ft. 9 in. ,, 9 ft. 9 in.	2 2 0
12 ft. 9 in. ,, 11 ft. 3 in.	2 8 0
13 ft. 3 in. ,, 11 ft. 3 in.	2 10 0
14 ft. 3 in. ,, 11 ft. 3 in.	2 14 0

And in other sizes. ALL WOOL.

AVOID IMITATIONS MADE WITH A MIXTURE OF COTTON.

The QUEEN says:—"The writer of this note had a year's experience of Cheviot Carpets, and finding them wear and look well, has every reason to be satisfied."

CHEVIOT CARPETS
CAN BE OBTAINED ONLY FROM
TRELOAR & SONS,
68, 69 & 70, LUDGATE-HILL, LONDON.

A Catalogue of all the best Floor-Coverings post free.
ESTABLISHED 1832.—ELEVEN PRIZE MEDALS.

MARINE HOTEL,

NORTH BERWICK, N.B.

(Twenty-two Miles from Edinburgh.)

FAMOUS SUMMER RESORT. Splendid Golfing Green. Sea Bathing. Sea Fishing, Boating, &c. Charming Excursions to the Bass Rock, Tantallon, and numerous Castles and Seats, and the well-known Links are a most delightful Promenade.

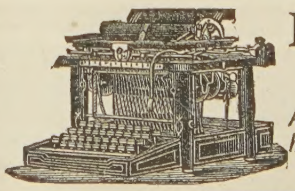
One of the finest Hotels in Scotland. Private Grounds; unrivalled Views; extensive system of Baths--fresh and salt water. *Cuisine* is well known for its uniform excellence. Table d'Hôte at separate tables, from 6.30 to 8.30. Post and Telegraph Office in the Hotel.

A. L. VOGEL, Manager,
And Proprietor of the New Hotel Splendide and Albemarle, Piccadilly, London.

REMINGTON

STANDARD TYPEWRITER

HAS BEEN FOR



Fifteen Years the Standard,

And embraces the latest and highest achievements of inventive skill.

WYCKOFF, SEAMANS, & BENEDICT,
100, GRACECHURCH-STREET, E.C.

◆ HEALTH ◆

EDITED BY

DR. ANDREW WILSON, F.R.S.E., &c.

LONDON: *FRIDAY, AUGUST* 30, 1889.

CONTENTS OF No. 334.

	PAGE
Notes by the Way: By the Editor.	337
Original Essays:—	
A Curious Conference. By Charles Marshall	338
Personal Health:—	
The Cocaine Habit. By Polytius	341
"Vinolia" Soap	342
The Family Circle:—	
Diet in Feverish Conditions	343
How to Prevent Summer Diarrhœa	343
Popular Science Papers:—	
Some of the Limitations of Medicine. By Stephen S. Burt, M.D.	344
Healthy Houses:—	
The Deterioration of Drinking-water and its Detection. By Surgeon Gilbert Kirker, R.N., M.D.	346
Public Health:—	
Relations of Increase of Population to Municipal Sanitation	348
Jottings from the Journals:—	
Mental Contagion—The Swimming-bath in London	348
IMPORTANT ANNOUNCEMENT	349
Our Letter Box:—	
Rules for Correspondents	350
Queries and Answers:—Replies: General, Sanitary, and Medical	350

Notes by the Way

BY THE EDITOR.

"Health is the foundation of all our physical happiness."—*Herder.*

PROF. FRESENIUS, of Wiesbaden, after a long series of chemical analyses, declares that an egg contains as much nourishment as a pound and an ounce of cherries, a pound and a quarter of grapes, a pound and a half of russet apples, two pounds of gooseberries, and four pounds of pears, and that 114 pounds of grapes, 127 pounds of russet apples, 192 pounds of pears, and 327 pounds of plums are equal in nourishment to 100 pounds of potatoes.

✣ ✣ ✣

I OBSERVE that Mr. Edward Jessop, of Hampstead, writes in a late number of the *Spectator* as follows:—"Sir,—I do not hope to convert Dr. Bell Taylor, and those who think with him, from the view that M. Pasteur's treatment is not only inadequate, but harmful; but a case such as I will relate as simply as possible ought to have weight with them. In February, 1888, my dog was bitten by a dog with every appearance of rabies; immediately afterwards the animal rushed on and bit a boy very severely through the unprotected hand, the wound taking two months to heal; the dog had previously bitten its mistress and other dogs. All the animals were destroyed, with the exception of mine, at once. I kept mine, partly from affection for the animal, and partly to prove that the first dog was rabid. I may say that within three minutes after the bite I thoroughly washed the wound in my dog; but, in spite of this, he died of typical rabies on the fourteenth day after being bitten. Through the kindness of a patient of mine, the two people were at once taken to M. Pasteur, underwent the treatment, and are now (nearly a year and a half afterwards) in perfect health. I went to Paris sceptical as to the results of M. Pasteur's treatment; but, after seeing the scientific principle and the openness of all the great Frenchman's work, I returned firmly convinced, as every unbiassed person has done, of its efficacy and its harmlessness."

✣ ✣ ✣

To this letter the Editor of the *Spectator* subjoins the following note:—"Surely the cases are very numerous in which the virus of rabies has lain dormant much longer than a year and a half. One eminent surgeon vouches for thirteen years as the maximum known duration of dormancy in the virus.—ED. *Spectator.*" Mr. E. Hart, in the *British Medical Journal*, justly adds: "So that the tender mercies of this most humane and kindhearted of zoophilists are so far perverted by the strong prejudice which he entertains on the subject of the advance of scientific knowledge and healing power by experiments on animals, that, when driven from any other position, he comforts himself by publicly suggesting that possibly Mr. Jessop's patients may yet die of hydrophobia. Happily, there is not the slightest possible ground for this painful suggestion, and it is one which, to say the least, is in such cases gratuitously cruel, since the final suggestion which he makes is one which has no accepted scientific basis, is contrary to all experience, and tends to keep alive in the minds of those who have been definitely cured a most agonizing but unreasonable feeling of suspense." But anti-vivisectionists evidently think more of a rabbit or a dog than of a man; hence there is no argument possible with them. The Apostolic injunction, to "suffer fools gladly," is most appropriate in this instance.

✣ ✣ ✣

SAYS Dr. Lauder Brunton, in the course of a recent lecture, "It is of the utmost importance in the treatment of disease to maintain the action of the heart, and to stimulate it when it is flagging. Amongst cardiac stimulants beef tea still maintains a foremost position. We have drugs which increase the power of the heart, and which are most useful in their place—digitalis, strophanthus, convallaria, adonis vernalis, and erythrophlœum, and the whole class of drugs usually known as cardiac poisons. Unfortunately these drugs do not always give

CANCEROUS DISEASES.

TESTIMONIALS.

The following is from Dr. John Sheerer, St. Albans, Sept. 5th, 1888.

MR. JOHN M. YOUNG, *Manager Missisquoi Mineral Springs.*

DEAR SIR,—My mother, Mrs. Susan Sheerer, of Virgil, Cortland County, N.Y., was pronounced by Dr. Brunson, of said town, to have had a cancer in her breast in 1866. She used two cases of Missisquoi Water, and was cured. She is now eighty-two years old, and in splendid health. Yours truly,

JOHN SHEERER.

MISSISQUOI SPRINGS.

[An Extract from "The Monthly Homœopathic Review," May 1st, 1870.]

By Dr. TUTHILL MASSY.

The Missisquoi Springs of Franklin, County Vermont, are at present rather frequently prescribed in England for diseases where the knife was the severe medicine of other days: I therefore deem it my duty to lay before your readers the experience which I have gathered relative to these Springs.

* * * * * * * *

The Spring A, Missisquoi Springs, is the one most generally exported, and which I have frequently prescribed. It gave great comfort to a lady who was suffered from a large open cancer in the right breast; cleansed the surface, relieved the pain, induced sleep, and diminished the tendency to bleeding, when applied externally, like simple water dressing, and taken in half-tumbler doses twice a day.

The benefits of the Spring A were very remarkable in a lady burdened with an ovarian tumour containing much water, with considerable abdominal tenderness. A few bottles always reduced her great size, and relieved her mi d from the dread of an operation which was once proposed.

PAMPHLET on application to the Sole Importers—

INGRAM & ROYLE, 52, FARRINGDON-STREET, LONDON, E.C.

AND OF ALL CHEMISTS.

us the result we desire, and at present we are often unable to say why they fail. We do not know their chemical constitution, and consequently we cannot modify it or produce at will drugs having a similar but not identical action, as we can, to a certain extent, in the case of antipyretics and analgesics. Xanthine, one of the constituents of beef tea, has a very powerful action on voluntary muscle fibre, but its effect on the heart requires to be more carefully made out." This is valuable testimony to the stimulant powers of beef tea. I advise my readers to try a big teaspoonful of "Bovril" dissolved in a breakfast-cup of boiling water when there is need for any such stimulant.

✣ ✣ ✣

The most recent process of embalming is called the "Brunelli Process." The blood vessels are cleansed by washing with cold water till it issues quite clear from the body. This may occupy from two to five hours. Alcohol is injected so as to take out as much water as possible. This occupies about a quarter of an hour. Ether is then injected to abstract the fatty matter. This occupies from two to ten hours. A strong solution of tannin is then injected. This occupies for inbibition from two to ten hours. The body is then dried in a current of warm air passed over heated chloride of calcium. This may occupy from two to five hours. The body is then perfectly preserved, and resists decay.

✣ ✣ ✣

I observe that the Richmond Board of Health (U. S. A.) is a good deal exercised over the project of a real estate enterprise to exhume and remove about three hundred small-pox dead, buried in 1882, at the risk of reviving an epidemic, and there is too much reason to fear that the City Council, accepting the passiveness of many physicians who take no interest in preventive medicine and who habitually ignore all such questions, as representative of knowledge on the subject, will permit the risk. Sir Spencer Wells, when before the Scottish Burial Reform and Cremation Society, Glasgow, last year, spoke briefly as follows with regard to a disease considerably less intensely contagious than small-pox:—There was a remarkable instance in Yorkshire, where a number of scarlet-fever patients were buried in the churchyard. A part of that churchyard was closed, but was afterward included in the garden of the rector, who had it dug up, and the scarlet fever from which those patients had died *thirty years before* broke out in the family of that clergyman and spread to the surrounding houses. There are many instances in which other diseases have been incited and spread in the same way. And to knowingly and wilfully take, or officially permit to be taken, such a risk as that which threatens Richmond in this case, is hardly conceivable of an enlightened community. Cremation, after all, is the only safety for the living.

✣ ✣ ✣

In reply to an inquiry regarding "vegetable musk," I may say that it is made from the seeds of the *Hibiscus abelmoschus*, a malvaceous plant. The ancient Egyptians used to chew the seeds to stimulate their appetites and make their breath fragrant, and they regarded them as aphrodisiac and astringent. Previous to the French Revolution, when it was the fashion to powder the hair, the seeds, called *ambrette*, were mixed with starch and kept till the starch had absorbed a suitable proportion of their perfume, when the seeds were removed and the musky-odoured starch was put up in packets for sale. Ambrette is now imported in large quantities into Europe, and is used in the preparation of the alkermes of Florence, and to adulterate musk.

Original Essays

"Life is not to live, but to be well."—*Martial.*

A CURIOUS CONFERENCE.

By Charles Marshall.

The other day I was much exercised in my mind regarding a certain query propounded in the midst of my slumbers. It seemed to me that I witnessed my thumb and fingers assembled together in solemn conclave, when the following interesting discussion took place between them:—

Pollex.—"It's a very grand thing to be a thumb. To be a thumb is to be big, to be strong, to be important. What the hand is to a man, that the thumb is to the hand. Take away the thumb, and the hand isn't a hand at all, but a paw, a set of hooks, and, indeed, looks very much like that of some monkeys in Brazil, whose thumb is so small that it can scarcely be seen. Any one can see in a moment how distinguished I am from the four fingers. *They* are all alike, one shorter, another longer, one thicker, another more slender; but they are all fingers; if one of them is lost it is no very dreadful thing—nothing in comparison with losing a thumb. They have two joints besides the knuckle, which gives them three segments, whilst I have only one joint besides the knuckle, and so have but two segments.

"I suppose the fingers think it better to have three than two; but that only shows their lack of judgment, and they can't help themselves. At any rate, I am a good deal stronger than any of them; indeed, I think I am as strong as all the fingers together. The Romans must have known how strong the thumb was, for they called it 'Pollex,' and this word comes from another Latin word, 'polleo,' which means to be strong and powerful, as you may see in your Latin dictionary. The Romans recognized my importance in another way too, for when, in their gladiator combats, one fighter was overthrown by another and so hurt as to be helpless, then, if the Roman ladies looked upon the vanquished with approbation, they raised their thumbs, and the life was spared; but if the fallen gladiator saw the thumbs pressed down, then he closed his eyes and awaited the fatal blow.

"The secret of my power is that I am better supplied with muscles than any one of the fingers, and my muscles are of all kinds too—some long and slender, others short and thick. What is called the 'ball of the thumb,' is nothing but muscle. You can know that there are muscles in the 'ball of the thumb,' for when a muscle contracts it becomes hard and tense, like bone almost; and if you squeeze a book or ball between your fingers and thumb, you can, with the other hand, feel the ball of the thumb grow hard when you exert your strength, and become softer again when your efforts cease. You can feel the same thing in your arm when you bend it at the elbow, and in the calf of the leg when you rise on tip toe.

"Now, no one of the fingers can pretend to have so many or so powerful short muscles as I; in fact, there are serious doubts in my own mind whether they have any at all. There is another thing that shows how important I am. If you bend the thumb back as far as possible you will see a deep trough between the cords on the outer side of the wrist. Some of the French medical students who take snuff, but who do not like to soil their fingers, are able to tip a pinch of snuff from the box into this little hollow, out of which they snuff it up quite

nicely; and, of course, if there was no thumb there would be no cords and no hollow, and then the poor students would have to get along without their snuff or else take it in some other way.

"Notice, if you please, how dignified I am. In both repose and action I stand aloof from the fingers, and am always straight or nearly so, whilst they are always more or less bent, as if bowing toward me in acknowledgment of my superiority. Moreover, it is generally thought that when anything is to be held between me and one of the fingers, I move *toward* it; but this is not the case, they all move toward *me*. When a pen or pencil is to be picked up I remain perfectly quiet, and the forefinger respectfully approaches me, and then, the duty having been performed, it retires. And in order to meet the other fingers I merely bend slightly across the palm and place myself opposite them, so that they may come forward and do what is required. What more striking evidence can you ask of my immense superiority to them in all respects? They are, as it were, my servants, and singly behave with proper respect. I say *singly*, because sometimes I carelessly lay myself down across the palm, and then, as if to prove their mean and treacherous natures, the fingers will close tightly on me and give me a terrible pain in my joints, as if the thumb-screw was on me. What could the musical genius do without me; and as for the flute, it would be impossible even to hold it without a thumb. There is another fact. People wear rings upon all their fingers, but whoever thought of putting a ring upon his thumb, and every one knows that rings are a sign of bondage, like collars, and chains, and handcuffs. People talk of having other people 'under their thumb,' and that shows clearly that I am big enough to cover a great deal, and strong enough to hold it down. I fully expect to be abused and hated for what I have said, but it is all quite true."

Minimus (the little finger).—"My big brother Pollex, who has just made so long and pompous a speech in his own behalf, seems to think that because he is big and strong and tolerably important, there is nothing to be said about the rest of us. Perhaps he thinks, too, that we are all afraid of him. I confess I should be a little fearful if I lived next door, like our brother Index; but as it is I feel tolerably secure, for he is such a stout fellow, and has so few joints in his back, that unless I move towards him, he can only reach my neck, and cannot touch my head at all. So I mean to speak my mind, and if he threatens to crush me I'll call on my two other brothers for help. To begin with, Pollex thinks it's a very grand thing to be a thumb; now I think it's a very *nice* thing to be a little finger. I am delicate and refined in my organization, and my tastes and habits are those of a gentleman of leisure and cultivation.

"Pollex boasts of his strength. I pride myself upon my agility. One cannot be everything. Pollex, no doubt, believes that people could not write without him; but I know better. Even he cannot hold a pen alone; but I can write without a pen at all—all that I have to do is to allow my nail to grow very long, and then, when it is cut into the proper shape like a quill pen, I can dip it in the ink and write very well. Pollex says a lot—very prosy and dull you found it too, I am sure—about muscles and snuff boxes and gladiators; now I am too wise to do anything of that kind, but just let me tell you what I might say on that subject if I pleased. Let me say, once for all, that I have one more short muscle than Mr. Pollex; they are almost as big too, at any rate their names are quite as long and mean just as much. If Pollex tells any more such stories he ought be called Mendax. I have plenty of long muscles too, some for bending me forward (and a great deal farther than Pollex can bend himself), and others for straightening me up again. And they are very independent too; they can bend me in all directions, and when the thumb and other fingers are holding a cup or a goblet I can stand aloof and show my freedom from such services.

"Not that I don't do anything; I would not have you think that I am useless. People point with me, not a distance, it is true, but to show a passage in a book or on a picture, partly because I am handsome and pleasant to look at, partly because I take up less room, partly because I am quite free and easy in my movements. How, too, could you drink from the hand but for me? I help to form the cup in the palm almost as much as the thumb, indeed we do it together. Now I was about to say, in proof of the relation between Pollex and myself, that the Fiji savages are in the habit of cutting off their little fingers in honour of the death of their near relations, and unless they valued the finger it would show no honour to cut it off; therefore—but you see the connection at once, and clearly, don't you?—I think I have now said enough. I have too much sense to tire you with such a speech as Pollex made, and I am sure I have set him an example of modesty and good taste. But I have no idea that he will be satisfied with what I have said, or with anything else out of his own burly self. The Greeks gave him a most proper name, 'Anticheir,' which means opposed to the fingers; and so he is, always in opposition to us and the rest of the world. He is a very Ishmael among digits; and, for my part, I do not envy him in the least, either his size, or his strength, or his stiff back, or his disposition."

Index (the forefinger).—"I cannot say that I fully approve what either Pollex or Minimus said. I cannot give all my objections, but I am sure that Pollex said too much and Minimus said too little; probably it was their 'natures so to do,' as their names imply. But my little brother Minimus, with all his pretensions to intellectual superiority, is, I fear, rather weak-minded. He felt, and very justly, that Pollex had boasted in a most improper way; but the best course was for him to say nothing in reply; and if Minimus had only asked my advice, he might now be enjoying the reputation of great wisdom; but it is too late. He has spoken, and he has evidently said all he could against Pollex. The truth is, Minimus had very little to say, and he spent most of his time in picking flaws in what Pollex said.

"Now I shall not behave in any such way. I do not care whether people think Pollex and I are brothers or fortieth cousins; he is Pollex and I am Index; he knows his business and I know mine. We rarely interfere with each other, although our duties require a closer acquaintance than is always pleasant to me, for you know brother Pollex is not very particular as to neatness; and, besides, naughty little folk have a horrid habit of putting him in their mouths and sucking him. I am extremely fastidious, and I cannot always repress a shudder as he presses me close in picking up a pin or a needle. Generally, however, we are separated by whatever we hold—as a coin, or a pencil, or penholder. It is true, as he says, that I generally move towards him when we act together. But I really cannot see any wonderful glory in standing still like a post; I would much rather move about and enjoy myself. Now I am the forefinger, and if you look in your dictionary you will see that 'fore' means prominent and important. The foreman is the chief of a gang of workmen, or the leader and spokesman of a jury—foremost means greatest and most important.

"My Latin name, too, shows how useful I am in another way. Index comes from the word meaning to point out, to indicate, to show, and I am always ready to point out scenery and other things at a distance; for, as Minimus says, he is often preferred in showing little things in a book or picture. For instance, when Hamlet showed old Polonius the cloud that looked 'very like a whale,' he used his forefinger; but if he had shown it in a book of natural history he would very properly have used his little finger. I am supremely indifferent as to whether he did or not. The Romans gave me another name, Salutaris. It is not fully understood why they did so, but the forefinger is used in beckoning and saluting, and, at any rate, it means something good. It is said that the Arabs of Palestine even at the present day rub their forefingers together as a sign of friendship. As to my muscles, I have to say that besides the ordinary long muscles which bend me forward and straighten me backward, I have a special extensor muscle which enables me to stand out straight even when the other fingers are clenched.

"Minimus spoke of writing with his nail. I believe some foolish young man did let his nail grow so long as to make a very fair pen; but perhaps he was not aware that the Chinese are in the habit of cultivating their nails to such a length as to require bamboo shields for their protection. The truth about writing is that I, Index, am the real scribe of the family. The pen is held between Pollex on one side and Medius on the other, while I rest above and between them and make the down strokes which give character to the handwriting. As to personal beauty, I freely confess my deficiencies. I am neither delicate like Minimus nor magnificent like Medius, and very often there is a curious curve and a twist beyond my middle joint; but that comes in part from my obliging disposition, and my pity for my sturdy brother Pollex. We do a great many things together. His back is rather unyielding, and so I always try to turn myself round a little so as to meet him face to face. But in spite of the twist I am not ugly or deformed, and I know that I am very useful. In a word, I point, I feel, I salute, I beckon. I help in picking up things, in writing, and, indeed, in almost everything that people do, and 'Handsome is that handsome does.'"

Annularis (the ring-finger).—"What a quarrelsome trio are my brothers Pollex, Minimus, and Index. Their harsh words jar on my tender sensibilities, and I am thankful to be so well protected by my tall, and strong, and best-natured brother Medius. We are devoted to each other, and I love him so much that if I were not his sister I think I could be his wife. You can see that we are more closely attached than any of the rest, because there is far less room between us than between him and Index or myself and Minimus, while Pollex stands aloof from us all. I keep myself very neat and tidy, and make home pleasant for brother Medius. In fact, my muscles are so connected with him that I can hardly move at all without him, though with him I can move nearly as far as he can. I am, though moving little myself, the centre of one of the most important actions of the whole body, namely, the rotation of the hand and forearm. The importance of these movements of rotation is very great; the hand can be placed in any position, and, in some cases, as in turning a screwdriver or the handle of a door, the movement itself is very powerful.

"Now, when I tell you that I am in a direct line with the 'ulna,' around which these motions occur, and that all my four brothers thus revolve round me at various distances, you will see that I have good reason for being satisfied with my position in life. I see all that is done, and am, as it were, in the very centre of a whirlpool of actions; yet am not obliged to engage in them myself. But I owe my safety in this, as in many other respects, to my tall brother Medius, and when afraid of anything I nestle close to him and murmur '*in medio tutus*,' at which he always smiles. But I am sure it is good Latin, and he knows very well that it is a fact.

"I am called Annularis because I wear the rings, and the Latin word for ring is *annulus*. I am therefore the ring-finger. Why I am the ring-finger is less easy to answer. I admit that being a young woman I am fond of jewellery, but I ought to mention other explanations that have been offered by wise people for the fact that rings are more commonly put in my charge. I say commonly, because all the digits have sometimes borne rings. There is an old saying that for a doctor or a soldier the ring-finger is the thumb, for a sailor the forefinger, for a fool the middle finger (which I think a most scandalous insinuation), for a married or diligent person the fourth finger, and for a lover the last or little finger. It was thought by some that a particular artery connected me with the heart, or a particular nerve with the brain, but modern anatomy denies the fact; and a more reasonable explanation is that I am the first vacant digit after the three that are used as symbols of three elements of the Trinity. In the ancient rituals of marriage the ring was placed by the husband on the top of the thumb of the left hand with these words: 'In the name of the Father,' removing it to the forefinger, saying, 'of the Son,' to the middle finger, 'and of the Holy Ghost,' finally leaving it on the fourth finger with the word 'Amen.' When a bishop, too, gives his blessing, it is with the thumb and next two fingers. Of course the wedding ring is most interesting, and I could say a great deal about it; but it is getting late, and I see that my big brother is getting impatient to address you before closing time, so I must stop."

Medius (the middle finger).—"I have the honour to be the biggest brother and chosen protector of my gentle sister Annularis. I am very tall, half a head taller than any of my brothers, and nearly as thick as Pollex, but rounder in the body, and more flexible in the joints. But comparisons are odious. I grant all that the others have said, and especially commend our sister for her becoming modesty in the statement of her duties. I wish, however, to draw attention to one faculty which we all possess to a greater or less degree; but which for certain reasons is most fully manifested by myself. I refer to the power of *feeling*, and it must be remembered that I possess a greater mental as well as physical grasp than the other digits, and that my superior height has enabled me to hear much that my brothers have not attended to, so that I am, I think, more learned and cleverer than any of them; and I am, therefore, quite satisfied with being that; and I don't want to boast about my muscles, or my nerves, or any parts of my anatomy.

"I don't pretend to be a physiologist, though perhaps I know quite as much about the subject as any of my brothers; one thing I do know is that some mammals have five digits, some four, some three, some two, and others only one—example, the horse. And that when some are missing, Pollex goes first, Minimus next, then Index, then Annularis, whilst I "Medius" alone remain on each Manus. That's something to be proud of, isn't it? I am always the survivor."

Linseed oil, rubbed briskly on with a piece of felt, will usually remove the white mark left by pitcher or goblet on sideboard or table.

Personal Health

"Be timely wise;
With health all taste of pleasure flies."—*Gay.*

THE COCAINE HABIT.

By Polytius.

One of the easiest things for a man to do is to fall into a habit. It is interesting to watch the evolution of a habit from its embryonic up to its mature stage. For a time man is its master, and goes on in the strength of the delusion that he will ever maintain the mastery. But a hidden force irresistibly carries him onwards, and he is unconscious of it, or else does not bring himself to face the truth, until at last it is *his* master, and he is helpless under its sway. He knows it now; but the occult power is like the tiny snowball, which receives an impetus at the top of a steep incline, and gains fresh force in its descent, until, ultimately, the momentum of the huge body cannot be resisted, and the quondam snowball carries everything before it.

I myself have been at the beck and call of an evil genius. Nearly two years have now gone since I first appreciated the virtues of cocaine hydrochlorate. A severe attack of toothache succumbed under its magic power in the short space of a few minutes, and in like manner did each succeeding onslaught of that most distressing malady disappear. I had now discovered a sovereign remedy for the dire complaint, and was truly thankful, but little did I know what was in store for me.

For months and months I kept the affliction at bay, while all the time the habit was growing upon me and waxing in strength. But even then I took it purely and simply for its anæsthetic properties—nothing more. Gradually I was becoming a slave to the drug, and did not know it. I knew the remedy was at hand, anticipated no evil consequences, and, therefore, had an easy mind.

The insidious foe claimed attention, and I now took it because I liked it—took it so much, indeed, that I rarely felt the full force of toothache, for even when a considerable time had elapsed—say twelve or fourteen hours—between doses, there was always a certain amount of anæsthesia left to deaden the pain a little.

About six months after taking the first dose my daily routine was something like this: In the morning, after breakfast, the slightest pretext in the shape of pain induced me to drug myself, and, once a dose had been taken, my fate for that day was sealed, for I was bound to take another and another. Dinner-time passed without my getting a decent meal, for no appetite was left me; besides, all attempts at swallowing solid food were difficult, from the action of the drug upon the throat. Liquids I could swallow quite easily, so my food chiefly consisted of fluids and a diet of very moist nature. Tea-time came, and I took tea with no accompaniment save a very small piece of bread, which I forced myself to swallow. After that each dose was repeated until eight o'clock *punctually*, when I took no more for that day. Then came the tug of war. In twenty minutes after the final dose I was miserable—abjectly miserable. I craved for more, but knew that if I yielded to the temptation no sleep would be forthcoming that night. In twenty minutes more I was in a terrible state of nervousness, and perspired profusely. By ten o'clock I had come through a faint, more or less severe, and the first symptom of returning consciousness was a yawn. Then I began to feel hungry, and took supper, consisting usually of boiled egg, milk, and bread. Soon after supper a feeling of exhaustion and languor compelled me to go to bed. My sleep was fairly good and refreshing, although throughout the night there had always been considerable skin-action. Breakfast was always a good meal, and must have helped to support me considerably.

Such was my daily routine.

"But," you ask, "what made you take it next day, when you knew you had such an ordeal to go through ere night?" I will answer the question as well as I can. The languor and exhaustion caused by the use of the drug on the previous day still existed on the forenoon of the next, to a greater or less degree, according to the extent of my indulgence. Cocaine I knew would dissipate the feelings. That is one reason why I took it. Another reason—and, perhaps, the chief one—was because it allured me into another and a sweeter existence. I was always perfectly conscious of everything that was being said and done around me while under its captivating influence. Any jarring against my own ideas was always received with equanimity. Good-nature seemed to have been instilled into me, and, altogether, I can imagine myself to have been a most amiable creature. I became talkative to a fault, and my great aim in company was to agree with everybody. If any proposal were made I would see to its accomplishment; if my own friends wanted anything done—no matter what—I would put it all right; if I wanted anything done myself I would begin immediately, or take a note of it. This taking of notes, particularly, grew in such a fashion that my note-book was literally filled up with plans for the future—very few of which, I may say, were ever taken in hand, so ridiculous were they. In the short space of twenty minutes or half an hour a thousand ideas would arise in my imagination, and I would be in a state of supreme happiness—at perfect peace with myself and the world at large—when, in one moment, they would vanish, and leave me in the most indescribable misery. My impulse now was to arrest the horrible sensations by procuring more of the drug, which, once within my grasp, no power on earth—I mean no rhetorical power—could have dissuaded me from taking. I was bent upon consuming it, and I *would* have it, in spite of fate.

It is curious to note the distinct line that exists between the climax of happiness and the abyss of misery. Not like opium, where the victim is let down gradually, but in less time than it takes to tell it, perfect happiness and the utmost dejection collide, and the sufferer is conveyed into ineffable gloom.

But I had another period far more severe than the first six months to encounter, and for the remainder of eighteen months I was a confirmed "cocaine eater." My hours of indulgence were entirely changed, owing to the weakening effects of improper nourishment, and with a great effort I abandoned the drug in the forenoon altogether, so that I could always take dinner. For a time I got on fairly well at this rate, and managed to be systematic in its use—or, rather, abuse; but in the natural course of events the habit knew no bounds, and kicked over the traces once more, so instead of taking the final dose at eight o'clock, I made up for what I lost in the forenoon by piling it on at night.

At this time I must have been consuming it at about the rate of thirty grains daily.

The elaboration of its effects was something like this. In about one minute after the first dose the sensation in the mouth was exceedingly agreeable, and this increased in pleasantness as each dose was repeated. In a short time its physiological effects began by a rapid heightening

of the imagination, an acceleration of the actions of the body, a strong desire to be hastening about and always on the move, and a stronger desire to poach about amongst old books and literature generally. Of course, these effects were what were produced in me, but I should think that they would differ in individuals as the idiosyncrasies of the people themselves differed.

When the maximum point of its exhilarating influence was reached, it was succeeded by a sensation of a dull, dreamy, semi-conscious nature, and yet not disagreeable; and just before the period of dejection, the buoyancy—a feeling as if you were suspended in mid-air—and that state just bordering on complete unconsciousness are indescribable. When I had taken a number of large doses in rapid succession there was always excessive perspiration, and paralysis of the vocal cords in such a degree as to affect speech.

Another effect—perhaps the most annoying—was a constant fear of being watched and suspected. I continually imagined that everybody's eyes were directed towards me.

For about a month or more before stopping it I sometimes took it during the night, thus being deprived of sleep. This occurred repeatedly during the time I have stated, which threw me into a state bordering upon madness.

Very frequently the thirst, over and above the anæsthesia, was so intense that any attempt to take food of a dry nature was futile, and might have resulted in choking if persisted in. Sometimes, when about to fall asleep, the uneasiness about the heart was sufficiently harassing as often to defer sleep for many hours. On some occasions the extremities assumed a livid hue, and were *always* icy cold; and not infrequently, after excessive doses, there was sickness and vomiting—poisonous doses probably acting as their own emetics.

When I stopped taking the drug altogether I did not do so by gradually reducing the quantity, but desisted at once; then followed the usual effects, but in an exaggerated degree. During the first fortnight I was beset with every disagreeable feeling imaginable, especially at intervals great uneasiness and twitching of the muscles, and a great desire to rest, but entire inability to do so.

It is extremely difficult to abandon its use altogether; easily acquired, but phenomenally difficult to shake off.

Thrice did I fail to shake myself from its grasp—ten days or a fortnight intervening between the times—but now at the end of three months I am looking upon it as a thing of the past, and, thanks to the services of kind friends and the attention and extraordinary kindness of a good and skilful doctor, I am now in wonderfully good health and spirits, having in less than three months gained over a stone in weight.

The periods of craving now come at longer intervals and with diminished energy.

This short paper has been written to answer the double purpose of a confession and a warning; and if it should so happen that any one reading this is in danger of becoming addicted to the practice, my sincere advice to that party is to desist at once. It is a wonderful and valuable drug when judiciously used, but woe be to its abuser.—*Chemist and Druggist.*

LONDON NECROPOLIS, Brookwood, Near Woking, Surrey. The largest and most beautiful cemetery in England. Five hundred acres exquisitely planted. Simple funerals. Earth to earth coffins can be used if desired. Pamphlets gratis. Apply—SECRETARY, 2, Lancaster-place, Strand.—[ADVT.]

"VINOLIA" SOAP.

WE have often recommended in the columns of HEALTH the new superfatted soap known as "Vinolia" Soap. We are pleased to give our readers the substance of Dr. Alder Wright's opinion upon it. Dr. Wright is a Fellow of the Royal Society; the lecturer on chemistry in St. Mary's Hospital Medical School; Cantor Lecturer on Toilet Soaps, Society of Arts, London; late Juror on Soaps, International Health Exhibition, London; Vice-President Society of Public Analysts, &c., &c. He writes as follows:—

"I have recently inspected the process of manufacture of your 'Superfatted "Vinolia" Soap,' and carefully analyzed the various materials employed, and the finished products.

"The results show that the ingredients are of excellent quality for the manufacture of a first-class soap, and that the process is carried out in such a way as to render the products wholly free from all surplus uncombined alkaline matter, and therefore incapable of acting on tender skins in the injurious and objectionable fashion exhibited by most kinds of ordinary soap. A further amelioration is also effected by the incorporation with the soap of 'plastic emollient matter,' well calculated to soften the skin, and diminish the tendency to irritation sometimes caused in very tender subjects by even the purest of ordinary soaps.

"The Medical 'Vinolia' Soap is impregnated with balsamic essential oils of antiseptic character; whilst the Toilet 'Vinolia' Soap is delicately scented, and wholly free from poisonous metallic colouring matters."

Another opinion is given as follows:—"A remedy that has been for some time in use, and has won golden opinions among physicians, nurses, and ladies, is 'Vinolia.' We have given it repeated trials, especially in cases of eczema, and in the proportion of five in every six cases have been exceedingly pleased with the results. It is emphatically what is called 'an elegant preparation,' that is, it is clean and not greasy, pleasant smelling and not malodorous. The only thing that need be said of it is that medical men, nurses, and others should try it for themselves."

HEART FAILURE.—The *American Analyst* thinks it would be an excellent idea if physicians of the present day would invent some other reason for about all the deaths which occur nowadays than the heart failure. It is difficult for any one conversant with the organs of the human body to understand how any human being can die without heart failure, while the causes of the failure of the heart at death may be very numerous. This might not be of serious moment were it not for the fact that hundreds of people are being nearly frightened to death by the constant use of the cause for sudden deaths, and many people who are sick, and necessarily have some heart symptoms, are kept in constant terror by reading or hearing in other ways of death after death by heart failure. It would be well if physicians who are too indolent or too ignorant to search out the disease lying back of the heart failure to consider how much harm they are doing the community, and if they cannot correct the habit, newspapers and the public should avoid giving currency to this unfounded and dangerous phrase. There are probably no more deaths from heart failure in these times than heretofore, but a new cause for death has been coined, and the nervous and timid are being severely injured by it.

TEETH.
A COMPLETE SET, ONE GUINEA.

Single Tooth, 2s. 6d.

FIVE YEARS' WARRANTY.

Dr. ANDREW WILSON, late R.N., says:—"I can recommend Mr. Goodman as a very skilful and humane dentist. His reasonable charges should attract to him all classes."

MR. GOODMAN, *Surgeon Dentist,*

(Late Manager for Messrs. Eskell,)

No. 1, LUDGATE-HILL (Over Messrs. DOLLOND'S, and opposite St. Paul's Cathedral), REMOVED from No. 41.

Hours 10 to 8.

Also at 68a, Market-street, Manchester; 30a, Bold-street, Liverpool: 57a, Boar-lane, Leeds; 2, Piccadilly, Bradford; 2, Bank-street, Sheffield; 36, Gallowtree-gate, Leicester; 8, Pavilion Buildings, Brighton; 251, Sauchiehall-street, Glasgow; 29, Hanover-street, Edinburgh; 156, Union-street, Aberdeen, &c., &c.

"SANITAS"
REGISTERED TRADE MARK

NON-POISONOUS THE FLUIDS.
COLOURLESS OIL.
FRAGRANT POWDERS.
DOES NOT STAIN BEST SOAPS, &c.

DISINFECTANT

Valuable Antiseptic and Disinfectant."—*Times.*
"Safe, pleasant and useful."—*Lancet.*
Of all Chemists, and of
The "SANITAS" COMPANY LIMITED,
Bethnal Green, London, E.

LEITH and LONDON.

The LONDON and EDINBURGH SHIPPING COMPANY'S First-class Steamships, **METEOR, IONA, MALVINA, MARMION, MORNA** ("Meteor," "Iona," "Malvina," and "Marmion" lighted by Electricity), or other of the Company's Vessels, are intended to Sail (till further notice) from **VICTORIA DOCK, LEITH,** every WEDNESDAY, FRIDAY, and SATURDAY, and from **HERMITAGE STEAM WHARF, WAPPING, E.,** every TUESDAY, WEDNESDAY, and SATURDAY.

FARES—First Cabin, including Steward's Fee, 22s.; Second Cabin, 16s. Deck (Soldiers and Sailors only), 10s.

RETURN TICKETS, available for Twelve Months (including Steward's Fee both ways)—First Cabin, 34s.; Second Cabin, 24s. 6d.

☞ *Provisions, &c., may be had from the Steward on Moderate Terms.*
Not responsible for Passengers' Luggage, unless booked and paid for.

Cheap Circular Tours round the Land's End, in connection with Clyde Shipping Co.'s Steamers.—Fare, 1st Cabin, 47s. 6d.; and by Bristol Channel, in connection with Messrs. Sloan & Co.'s Steamers.—Fare, 1st Cabin, 35s.—(Railway Fares extra).

Apply in LONDON, to London and Edinburgh Shipping Company, Hermitage Steam Wharf, Wapping; Aberdeen Steam Navigation Co., 102, Queen Victoria-street, E.C.; G. W. Wheatley & Co., 23, Regent-street; Lavington Brothers, 69, Old Bailey; EDINBURGH—Cowan & Co., 4, Princes-street; GLASGOW—Cowan & Co., 23, St. Vincent-place; GREENOCK—D. Macdougall, 1, Cross Shore-street; or to THOMAS AITKEN, 8 & 9, Commercial-street, Leith.

Telegraphic Addresses: Leith, "Aitken;" London, "Edina."

"A BOON TO LADIES."—*Lady's Pictorial.*

THE SANITARY ROSE POWDER.

WHITE OR PINK
In Packets, 6d.,
Boxes, 1/-, 1/9, 3/-
Of all Chemists.

"Fragrant, Soothing, Cleanly."—*The Queen.*
Antiseptic, Soluble.

FOR NURSERY AND TOILET USE.

Invaluable for CHAFES and IRRITATIONS of the SKIN caused by Sunburn, Cold Winds, Harsh Soaps, &c. Comfortable to the feet in walking.

Manufacturers—
JAMES WOOLLEY, SONS & CO.,
Manufacturing Pharmaceutical Chemists, MANCHESTER.

"SHOULD BE IN THE HANDS OF EVERY YOUNG MAN."

AN IMPORTANT WORK.

"Serviceable alike in the cause of health and of moral purity."

A

LECTURE TO YOUNG MEN

On Purity of Life and the Preservation of Health.

BY A GRADUATE.

Post free, 1s. 1d., from

H. RENSHAW, MEDICAL PUBLISHER, 356, STRAND, LONDON, W.C.

"In these days of unblushing quackery," writes a clergyman, "it is refreshing to find a book one can recommend to young men. Such is the 'Lecture to Young Men' by a Graduate."

This pamphlet contains an exposure of quackery, and gives full directions for the restoration of health and vigour in all cases of debility.

VAN HOUTEN'S COCOA

EASILY DIGESTED—**PURE**—SOLUBLE—MADE INSTANTLY.

Incomparably THE BEST & MOST ECONOMICAL.

Very strong and nutritious,
THIS Cocoa is cheaper and more satisfying than tea.

"Admirable," "flavour perfect," "& so pure." } BRITISH MEDICAL JOURNAL. — "Delicate aroma," "pure & unmixed," "goes a long way." } LANCET.

"Its purity is beyond question." "Once used, always used."—HEALTH.

SAMPLE TINS GRATIS—through your Grocer or Chemist.

"DRINK Bontha"

It is not medicated, but a gently stimulating and remarkably sustaining, and refreshing aerated beverage.

For a clear head and good spirits, drink "BONTHA."

For an appetite for food and an appetite for work, drink "BONTHA."

"BONTHA" is prepared from TEA, from which the tannin has been removed.

"BONTHA" contains no drugs, alcohol, nor artificial stimulants or ingredients.

"BONTHA" may be obtained from all Wine Merchants, Grocers, and Chemists, price 3s. per dozen, or from the

SOLE PROPRIETORS,
MAY-DAVIS & CO., WESTMINSTER.

GOOD TIDINGS FOR SUFFERERS.
ASHTON'S
Gout and Rheumatic Cure.
IS GOUT and RHEUMATISM CURABLE?
To any asking the anxious Question,
WE ANSWER, Do not despair till you have tried
In Bottles at 1s. 1½*d.*, 2s. 9*d.*, 4s. 6*d.*, & 11s. [ASHTON'S CURE.

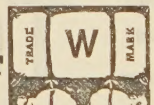
Mr. J. Dewhirst, 14, Commercial-street, Huddersfield—being a great sufferer from Rheumatism and Rheumatic Gout, was induced to try Ashton's Cure; he found instant relief, and strongly recommends it to all similarly affected.

Ashton's Asthma Cure

Is the finest medicine in the world for this most distressing complaint. Asthma, Bronchitis, Coughs, and Consumption prevented. Price 1s. 1½*d.*, 2s. 9*d.*, 4s. 6*d.*, & 11s.
GIVES IMMEDIATE RELIEF.
Mr. W. Nicholson, 37, The Grove, Vauxhall, S.W.
"I have found great relief from taking your Asthma Cure, and will strongly recommend it to any sufferer I know. It is a great boon."
Of all Chemists, or post free from the Proprietor,
J. WARNER, 70 & 71, CHANCERY-LANE, W.C.

SEVENTEEN GOLD, SILVER, & BRONZE MEDALS.
WM. WOOLLAMS & CO.,
ORIGINAL MAKERS OF GUARANTEED
NON-ARSENICAL
WALL PAPERS.
TO BE OBTAINED OF ALL DECORATORS.

Manufactory and Sole Address:
110, HIGH STREET
(Near Manchester-square),
LONDON, W.



NOTE TRADE MARK.

Works by Dr. ANDREW WILSON, F.R.S.E.

CHAPTERS ON EVOLUTION: A Popular History of Darwinian and Allied Theories of Development. Third Edition. Crown 8vo, cloth extra, with 259 Illustrations, 7s. 6d.

LEAVES FROM A NATURALIST'S NOTE-BOOK. Post 8vo, cloth limp, 2s. 6d.

LEISURE-TIME STUDIES, chiefly Biological. Third Edition, with New Preface, Crown 8vo, cloth extra, with Illustrations, 6s.

COMMON ACCIDENTS, AND HOW TO TREAT THEM. By DR. ANDREW WILSON and others. With numerous Illustrations. Crown 8vo, 1s.; cloth limp, 1s. 9d.

LONDON:
CHATTO & WINDUS, 214, Piccadilly, W.

KEARSLEY'S WIDOW WELCH'S FEMALE PILLS have a reputation of over
ONE HUNDRED YEARS,
and are the acknowledged leading remedy for female complaints. They restore a healthy hue to the complexion, in place of the deathly pallor so distressing to witness. May be obtained of all Chemists, 2s. 9d. per box; or by post, 34 stamps, from SANGER & SONS, 489, Oxford-street, London.

General Nursing Institute,
5 & 4, HENRIETTA-STREET,
COVENT GARDEN, LONDON, W.C.
Established 1862. Solely under Medical Direction.
HOSPITAL TRAINED NURSES for every description of disease—MEDICAL, SURGICAL, MENTAL, and MIDWIFERY—can be obtained at this Institute on application to the Secretary or Lady Superintendent at a moment's notice, being resident in the Home.
MALE ATTENDANTS and NURSES specially for FEVER cases.
Telegraphic Address, "Nursing Institute, London."

ONE BOX
OF
CLARKE'S B41 PILLS
IS WARRANTED TO CURE
All ailments of the Urinary Organs (acquired or constitutional), Gravel, and Pains in the Back.
GUARANTEED FREE FROM MERCURY.
Sold in Boxes, 4s. 6d each, by all Chemists and Patent Medicine Vendors throughout the World; or sent to any address for sixty stamps by the Makers,
THE LINCOLN AND MIDLAND COUNTIES DRUG COMPANY, LINCOLN.
Wholesale Agents: BARCLAY & SONS, London, and all the Wholesale Houses.

The Family Circle

"The child is father of the man."—*Wordsworth.*
"In bringing up a child, think of its old age."—*Joubert.*

DIET IN FEVERISH CONDITIONS.

No question has occupied the minds of medical men for ages more than this. If we go back to the days of Hippocrates, the celebrated physician of Greece who flourished about the year 500 B.C., we find that light diets for fever-patients was the order of the day. Since the days of the "father of medicine," however, great changes have taken place; at one time fever-patients being injudiciously fed, at another time starved. By following correct dietary principles the mortality in fevers can be reduced, and many given strength to go through the latter days of the disease when otherwise that strength would fail and the vital spark go out.

"Experience," writes a celebrated physician, "has demonstrated that fever-patients are capable of no inconsiderable degree of assimilating nourishment, and that the specific symptoms of their diseases are seldom, if ever, aggravated by its judicious administration." On the other hand, as Sir William Jenner says, "all nourishment which leaves solid residue, as milk, should be avoided." As pointed out by Dr. Murchison and others, beef-tea and meat-soups often produce diarrhœa. Of all the aliments ever given by the doctor, milk takes the precedence. It contains all the nutrient principles essential to life, and is the only safe and natural food for infants. But cow's milk has its drawbacks. "When milk is drunk in any quantity, the gastric juice in the stomach produces large curds, which are sometimes hard, like felt, and are very indigestible and irritating to the stomach" (Brunton).

In all cases of fever, and also when, for any reason, the stomach is incapacitated for work, the milk and other food given should be peptonized or pre-digested. A most effective method of doing this is with the Fairchild Zymine Peptonizing Powders. Milk prepared with these is sweet and palatable, and will not curdle, even if strong acid be added to it. It is safe, bland, and nutritious, and has been the means of saving many a life.

It is the only proper artificial food for infants; and we believe the Fairchild Zymine Peptonizing Powder is formulated from the most modern and correct standpoint, upon the basis of exact chemical and physiological investigations, with the express object of so modifying cow's milk as to render it human-like in character. The necessity for thus modifying milk is indicated by the dangers as described by Sir William Jenner. He says, "I have seen the patient restless, sleepless, or drowsy, his temperature raised several degrees above what it had previously been, vomit a quantity of curd; and at once the restlessness cease, the temperature fall, the skin become moist, and the patient drop into a quiet sleep. All the threatening symptoms vanish with the ejection of the offending material; or the undigested curds may accumulate in the bowel, inducing flatulent distention and pain in the abdomen, restlessness, and increased febrile disturbance. Under these circumstances I have seen an enema of thin gruel bring away a large vesselful of offensive, sour, undigested curds. Or, again, the undigested curds may themselves (and this has not been an uncommon consequence of milk-diet in my experience) irritate the bowels, and produce, keep up, or greatly increase diarrhœa."

A distinguished chemist once remarked, "Do not forget that a pint of milk contains as much solid animal matter as a full-sized mutton chop." These words were written some years ago, and since then the science of dietetics has undergone a revolution; and, in case of disease, *all foods* may now be given in such a form as not to tax or encumber digestion, but prove a life-saving boon.

HOW TO PREVENT SUMMER DIARRHŒA.

Referring to Dr. Ballard's report on this topic, the *Lancet* says that certain practical suggestions are made to sanitary authorities. The first of these relates to the prevention of the fouling of the soil with matters out of which the material of diarrhœa can be produced: a suggestion which involves such construction of drains and sewers as shall carry away all liquid filth without allowing the passage of any such matters into the surrounding soil, and which also necessitates a frequent removal of all other filth about dwellings which cannot be conveyed to sewers—indeed, a daily scavenging of premises during diarrhœal seasons. In a similar way strict and detailed cleanliness should be maintained inside dwellings. In the next place, dryness as well as cleanliness of the soil on which dwellings stand should be secured by means of concreting the surface or the provision of some other impermeable surface, which will enable all wetness at once to flow away and prevent the uprising into dwellings of moist subsoil air.

This precaution is more than ever needed in the case of houses built upon a soil the former use of which has involved its containing a good deal of organic matter; and the drying of the soil by special means of subsoil drainage is the more imperative wherever subsoil water comes within a few feet of the surface. Another suggestion relates to the free ventilation of dwellings; and it is implied that, even where the air within houses is, under ordinary circumstances, far from wholesome, a vast amount of good can be obtained provided the free dilution of the air is possible. To secure free ventilation, there must, in the first instance, be ample room *about* dwellings—that is to say, there must be open space to the front and to the rear. And these spaces being provided, windows which are made to open, at least in their upper halves, should be so placed as to secure the free admission of air and adequate ventilation *within* dwellings.

According to this recommendation, the vicious practice of building houses back-to-back is absolutely condemned. It is also needless to say that even where there are open spaces, if these are occupied by faulty midden-privies and accumulations of refuse, they may do more harm than good, for under such circumstances the ventilation, so called, will be the admission into dwellings of a fouler air than that which they already contain. Dr. Ballard next adverts to the important question of food-supplies, and, whilst he is unable to exclude any food from the list of those that may become infected with the diarrhœa contagium, he urges that special precautions are needed in the matter of milk-supplies, which call for protection from every form of filth contamination, aerial or otherwise, from the milking process and the cowshed until it reaches the consumer. Conventional cleanliness does not suffice; milk must be protected from filth in its most obscure forms—from ground air, from ill-ventilated storehouses, from larders not open to a current of pure air, from underground cellars, from confined cupboards in dwelling rooms and on stair heads, and from all similar places. And all milk is safer if it be boiled before it is

used, for milk seems to serve as one of the aptest breeding grounds for septic and other allied organisms.

In short, if we consider these and other suggestions which Dr. Ballard lays down, we find that the nearest approach which can be made to procuring in and about houses and food-supplies of a really pure air is the best guarantee against summer diarrhœa that can be devised; so, also, everything about a house that tends to lower health and vitality, and which consequently renders a population more liable to the influence of the essential cause of the malady, should be avoided.

Dr. C. R. Illington recommends a process for compelling unwilling children and infants to take medicine deemed necessary for them. This consists in "fixing the cheeks firmly with the finger and thumb of the left hand, while the spoon is inserted with the right." But how much better a "process" would be the daily inculcation in children of the habit of *obedience* on the part of the mother. Many parents submit to the whims and consult the preferences of their children during health, and then try to enforce obedience when serious illness makes the following of directions a necessity. If obedience is the law of the household, there will be no need of any "process" such as the one alluded to, or that other, still more pernicious, of holding the nose to compel the swallowing of what is in the mouth before respiration can go on, as in this case there is serious danger of forcing the medicine into the Eustachian tube, with the risk of suffocation.

The extreme summit of the Eiffel Tower consists of a small circular gallery less than six feet in diameter, and surrounded by a hand-rail. The floor is three hundred mètres above the ground, and from the centre rises the rod that serves as a lightning conductor and flagstaff. In this small gallery M. Mascart presides over the Bureau Central Météorologique established there. The instruments comprise a registering thermometer and hygrometer, a psychrometer, and several maximum and minimum thermometers. There are, in addition, a set of Richards's thermometers and hygrometers that constantly transmit their readings electrically to the Arts Libéraux building, where they are recorded. Outside the gallery are placed a recording actinometer and rain-gauge, and sixty feet below is a large registering barometer. An admirably installed anemometer forms a part of the apparatus. It is mounted on a rod about ten feet high. The vanes, which are of aluminium, are mounted so as to move under the lightest wind-current. Electrical contacts are so arranged as to record each displacement of air of one mètre, each displacement of fifty mètres, and each of five kilomètres. These contacts transmit the effects to the ground station, where they are recorded in speeds per second. A number of other apparatus are included in this very complete laboratory, which has been in regular working for some time. It was asserted, as one of the many objections raised against the Eiffel Tower, that the oscillations at the summit would, under certain unfavourable conditions, be dangerous: it is therefore satisfactory to record, that, with the highest wind-velocities yet observed, the movement at the summit of the tower is hardly appreciable.

CHEMICAL ANALYSIS.—Dr. Drinkwater, Lecturer on Chemistry in the Edinburgh Medical School, undertakes the Analysis of Water, Foods, Wall-Papers, and of all other products and articles connected with Household Health and Commercial Interests. Terms on application to Dr. Drinkwater, Chemical Laboratory, 41, Chambers-street, Edinburgh.

Popular Science Papers

"Blessings on Science! When the Earth seemed old,
When Faith grew doting, and our reason cold,
'Twas she discovered that the world was young,
And taught a language to its lisping tongue."

—*Charles Mackay.*

SOME OF THE LIMITATIONS OF MEDICINE.

By Stephen S. Burt, M.D.

It is a trait peculiar to some minds to believe too much and to others to believe too little. Between these extremes, however, there are many who, though keenly alive to the limitations of medicine, are, at the same time, able to appreciate the great boon it is to mankind. There may be those who would resent the idea of circumscribing our art, but "truth can never be really injurious, whatever phantoms apprehensive ignorance may conjure up around it."

The questions have often presented themselves to me why, after so many years of familiarity with disease, is there such a wide difference of opinion regarding its management? Why is it possible that there are two large schools of medicine opposed in theory if not in practice? Why the endless and surprising consumption of patent remedies? It would seem that more or less superstition still prevails in reference to disease, as well as much ignorance respecting its natural history. I am not well convinced that illness is a necessary concomitant of human existence; and to believe that it is unavoidable is to paralyze all legitimate efforts for its prevention. That it will, at any time, be wholly eradicated is too much to hope, and as Utopian as to expect that a high order of knowledge will ever be universal; nevertheless, great mental attainments and perfect physical health have been realized, and therefore must be accepted as a standard for approximation. Nor is such a realization fortuitous. Long years before our era a wise philosopher of Greece declared that *chance* was nothing more than *cause* unperceived by human reasoning. Now, the welfare of the human race suffers in proportion to the survival of a belief that chance, and not some ascertainable cause, underlies the evils that endanger it. We are prone to shift the responsibility for our misfortunes upon others, and slow to take the blame on ourselves, where it commonly belongs. Life is certainly a desirable thing under favourable circumstances, and oftentimes we are the makers, or, at least, the modifiers of our environment. As a rule, bad health is the foundation of the greater part of the unhappiness of man. And yet nothing is more positive than that the preservation of good health depends upon a strict observance of the laws of being, which include those of inheritance. Many of these precepts are well understood, but they are by no means generally heeded; for, though life is undoubtedly shortened by ignorance, it is also curtailed by a disregard of what is known—a failure to profit by the understanding. All infringements of the rules of health entail suffering upon the individual, his contemporaries or his descendants. It is the inability to appreciate that man is but a molecular vibration in the great molar pulsation of life, that allows him to hope that action will ever be not followed by reaction. Furthermore, nature is never cognizant of extenuating circumstances. Whatever a man's motive, he is equally a victim of a neglect to preserve his bodily well-being, whether his intentions be good or bad. We see death prematurely, and with impartiality, destroy the just and the unjust. We know that life bears many an old sinner to its utmost limit;

and, contrariwise, that goodness is not incompatible with extreme old age. Seeing and knowing these things, are we shut our eyes and be oblivious to such truths, or are we to awaken to a just appreciation of the invariable relation of cause and effect, however far removed one from the other?

Life has been defined as "the continuous adjustment of internal relations to external relations." Hence, a partial failure of the inner man to meet the successive changes that are going on about him means incomplete life or disease, and a complete failure of a similar adjustment signifies death. The transmission and the development of characters known as inheritance are made clear by the hypothesis of *pangenesis*, which, therefore, with your permission, let me give: "Every unit or cell of the body throws off gemmules or undeveloped atoms, which are transmitted to the offspring of both sexes, and are multiplied by self-division. They may remain undeveloped during the early years of life, or during successive generations; and their development into units or cells, like those from which they are derived, depends on their affinity for and union with other units or cells previously developed in the due order of growth." Here we find an explanation of the manner in which predispositions to disease are probably transmitted, and, what is more, the particular form of inheritance known as *atavism*, or the recurrence of certain features after one or two generations of immunity.

I dwell upon this matter of inheritance in order to show how futile the attempt to construct a perfect being out of imperfect material. No amount of therapeutic skill will ever be able to atone for the fatal mistake of unwise parentage. The laws of generation are as applicable to man as to the lower animals. It seems unfair that the child should suffer for the shortcomings of the parent, but the offspring is a continuation of his progenitors, the product of those who have gone before, *plus* his own individuality. Hence, what affects the child in some degree affects the parent. Indeed, the suffering of a parent over the misfortunes of the child is often greater than that of the child itself. It is important that man should understand the great power that inheritance exerts upon the race for good and for evil, so that he may make a wise departure in the right direction; and that he should know that his daily life so regulates his habits of mind and body that each succeeding day is the sum total of the days that have gone before in its influence upon his future health and movements.

Confucius says: "When you know a thing, to hold that you know it; and when you do not know a thing, to allow that you do not know it—this is knowledge." The laity are of necessity more or less ignorant of the nature of disease. And it would seem that their ignorance is shared by no inconsiderable number of our profession. Every malady pursues a definite course, and ends in restoration, incomplete recovery, or in death. Now, I believe that those medical men who are familiar with the natural history of disease will admit that the milder forms of most acute affections will pass through their various stages and end in recovery without the assistance of a single drug. Moreover, I think they will be obliged to acknowledge that, under the most favourable circumstances and most skilled treatment, many persons die overpowered by the virulence of a malady. The daily record of vital statistics would seem to prove as much. And the pathologists will bear testimony to the fact that where disease, either acute or chronic, has invaded a vital organ, just so much of the tissue as is destroyed remains destroyed and is never reproduced. Have we a broken-down lung? The best that can happen is that the process shall be stopped. Are portions of the kidneys degenerated? We can but save the remainder. Has the liver begun to retrogade into fibrous tissue? We can at best but check the retrogression.

The probable reason that treatment does not keep pace with the rapid advance of pathology is that therapeutics has gone astray, since the only possible solution for some of these difficulties is to seek out the cause and obviate it. A great deal of time and talent have been wasted in a fruitless search for specific remedies for disease, like unto the metaphysicians who have been asking unanswerable questions for hundreds of years about the unknowable.

While it is possible to imagine a community so intelligent as to exist free from the ravages of disease, it is too much for the most sanguine to hope for in the near future. But, notwithstanding this, the history of the recent past assures us that already great strides are being made in the proper direction. Devastating epidemics are less common, because stupidity and superstition are being overcome by intelligence and a more general recognition of the sequence of cause and effect.

We have many useful drugs, some that are indispensable, but they are mostly double-edged tools to be handled only by trained hands. The man unfamiliar with disease who ventures to administer these drugs because he happens to be acquainted with their names, is very much like the literary aspirant who resorted to opium in the vain hope of becoming a De Quincey.

Whenever the germs of disease gain admission to the body, nature makes strenuous efforts to throw them off, and, although it takes its own time, it is often successful. For example, fever, by destroying the morbid products that produce it, serves a most useful *rôle* in the restoration of the patient to health. And, as part of nature, the skilful physician stands by in readiness to do his share in furthering the process already initiated. By an intimate acquaintance with the phenomena of disease, and the means by which they are manifested, he is enabled to do the right thing at the proper moment, and thus frequently turn the scale toward recovery, when without his intelligent interference the balance might fall in the wrong direction. But the meddlesome interposition of the ill-informed is often productive of great harm. A burning desire to do some impossible thing leads the unwary practitioner into many fatal extravagancies. To have the knowledge when not to act, and the moral courage to forbear and give nature a reasonable chance, are indeed combinations of gifts as desirable as they are rare.

From this it follows that the man who recognizes the limitations of medicine is by far the safest adviser. There are no real specifics for disease; and to believe that somewhere in the animal, vegetable, or mineral kingdoms, hidden from the eye of man, there are to be found by diligent search a cure, at least, for each of the many ills that flesh brings upon itself, seems much less rational than to consider all these troubles are induced by violations of laws, known or discoverable, which must be obeyed and cannot be evaded. In the scheme of nature it would have been much simpler to eliminate all pain and disease than to provide occult remedial agents for each, were either alternative within the scope of creation.

No; disease is avoidable to a very considerable extent, if not entirely. And this is possible just in proportion to our knowledge and our will to act thereon. But be-

cause of our ignorance and of our failure to live up to what is known, we are yet far removed from perfect health.

Let us now glance at what we can do. To begin with, we are able to give much instruction regarding the avoidance of disease. We can relieve functional troubles first by the simpler means of rest, food, or exercise, as the conditions demand. We can quell undue pain. But we cannot continue to supply medicines that will take the place of proper living. The man who neglects his own health, and expects the medical profession to make up for his negligence, is somewhat like a person careless of fire in his own house, because there happens to be an efficient fire department in town. The flames sometimes get extinguished if the alarm is sounded in time. We can assist nature in her endeavour to cast out morbid products by various therapeutical expedients. We can remove some of the exciting causes of disease, or else take the patient beyond their reach. We can place him under the most favourable circumstances for nature to do her work, and at critical moments stimulate the flagging powers, and thus bridge over a yawning gulf. We can palliate many of the distressing symptoms of disease, but we cannot atone for all the outrageous infringements of nature's inexorable laws by dosing with drugs, and, moreover, it is not likely that we shall ever be able to do so.

It is possible that we are upon the threshold of a new era in the treatment of infectious and miasmatic diseases, in which new reasons will be found for the survival of old remedies, and many useful additions will be made to our pharmacopœia. The wonderful discoveries of Pasteur in France and of Koch in Germany, and the splendid achievements of the former in his applications of them, seem very fruitful of promise. But, notwithstanding all this, it is much safer to be cautious about mad dogs than to run any undue risks because Pasteur has evolved a means of lessening the terrors of rabies.

And now, in conclusion, I would venture to claim that the answer to my three questions at the beginning of this paper is found in the fact that there is a natural cycle to many diseases wherein there is a tendency toward recovery that, to be sure, is favoured or retarded by a multitude of circumstances, but which often takes place irrespective of medication. And this fact is the substratum of all those differences of opinion that are continually arising among superficial observers; is a reason for the survival of many absurd therapeutical theories; is the explanation of the existence of the vagaries of faith and of mind-cures; and, what is perhaps the most lamentable of all, makes it possible for the designing to trade upon the credulity of the public with their ofttimes harmful nostrums.

Fifth Edition.—Now Ready.—Greatly Enlarged, and completely Revised.

"A Book every Young Man should read."

"A Lecture to Young Men on Purity of Life and the Preservation of Health." By A Graduate. Price One Shilling, or post-free, 1s. 1d., from Henry Renshaw, Medical Publisher, 356, Strand, London, W.C.

This pamphlet, now being issued in its Fifth Edition, forms a complete refutation of quackery of all kinds, and is a safe and reliable guide, from the medical standpoint, to all young men. Every Youth should read this pamphlet as a guide to the safe conduct of life in a moral and physical sense. Full directions for the treatment of "Nervous Debility" so-called, and allied ailments, are also given. Thousands of sufferers have welcomed this pamphlet as a veritable beacon-light to health and purity of life.

Healthy Houses

"A happy home must be a healthy home."—*Anon.*

THE DETERIORATION OF DRINKING-WATER AND ITS DETECTION.

By Surgeon Gilbert Kirker, R.N., M.D.

It has been proved that drinking-water produces disease in the following four ways:—

1. By containing in solution poisonous metals. 2. By holding in solution too large a quantity of certain salts, as the chlorides and sulphates of lime and magnesia. 3. By containing in suspension or sediment certain parasites or their ova. 4. By containing organic matter, or the substances resulting from putrefaction.

It is the fourth way alone which I propose to consider, and shall, therefore, dismiss the others with no further remark than this, that in them the agent is constant, is determinable with certainty, and with it the evil results can be satisfactorily connected.

The organic matter in water is present in two conditions, dead and living. The former, on being consumed, may produce disease, such as diarrhœa, indigestion, and even febrile affections, while the latter may give rise to specific diseases, such as typhoid fever and cholera.

The latter action of organic matter is by far the more important, and that it is exercised is the belief of all sanitarians, with the exception of Prof. Pettenkofer and his small following.

It is also generally held that this specific action is unlimited, both as regards time and space; that once a water receives even a small specific contamination, it is ever afterward dangerous, no matter how long or far it may flow or percolate. This belief is founded on the reports of outbreaks of disease, such as the epidemics of typhoid fever at Lausan and Caterham.

Again, it is generally held that there is no means known, chemical or other, by which unwholesome waters can with certainty be separated from wholesome.

Now, I consider the general view regarding the specific action of organic matter in water to be too extreme; and to be untenable in presence of the proved wholesomeness of many specifically contaminated waters, such as that of the Thames and a great number of other rivers. I believe that the evil action of drinking-water is not due so much to pollution received from without as to deterioration taking place in itself under improper conditions of storage. Chief among such conditions are stagnancy and elevated temperature of the water, limited air supply, and absence of light. The experiments of Prof. Bischoff and Dr. Percy Frankland, though not made for this purpose, show that in all waters under the conditions of stagnancy, elevated temperature, and limited air supply, a teeming multiplication of micro-organisms takes place. Experiments, which I have made in this laboratory, demonstrate the same thing, and, also, that the multiplication of micro-organisms is inhibited, to a certain extent, by motion of the water artificially induced.

Again, some of the experiments of Dr. Dupré show that the amount of contamination which is added to water is not of much consequence; that if the favourable conditions for the growth of micro-organisms exist, it matters little whether many or few are added; in a short time the result is practically the same.

The effects on water of the absence of light has not been much studied; but reasoning from analogy, there

SCOTCH TWEEDS

DIRECT FROM FACTORY.

If you want a really good **ALL-WOOL SCOTCH TWEED**, at Maker's Prices, in Worsted, Saxony, or Cheviot, *WRITE FOR PATTERNS.* All our own Manufacture. Any length cut. Splendid Selection. Tailors supplied with bunches of Patterns. Parties' own Wool made into Cloth. Heavy Tweeds, 1s. 9d. per yard; Light Tweeds, 1s. 2d. per yard. Blankets, Rugs, Winceys, Flannel, &c. Carriage WOOL. of Wool paid, and Patterns sent free.

IMPORTANT NOTE.—All Wools sent to be made into Heavy Tweeds, Blankets, Crumbcloths, &c., &c., are made from two-ply yarns. This makes the Cloth finer and wear much longer than when it is done in the ordinary way. Cloth will be returned in One Month from receipt of Wool.

A. COLQUHOUN, Manufacturer,

GALASHIELS, SCOTLAND.

RESPECTABLE AGENTS WANTED IN EVERY DISTRICT NOT YET REPRESENTED.

COCA LEAF

PREPARATIONS:

COCA TABLETS.

Containing Borax, to promote action on the Throat and the Vocal Cords. 2/6 per box.

COCA LOZENGES.

Without the Borax, for persons to whom its flavour would not be agreeable. 2/6 per Box.

COCA ELIXIR.

For making COCA Wine, the dose being 15 to 20 drops to the wineglass; can be taken in any fluid. 3/- per Bottle.

COCA TEA.

COCA, in combination with selected Teas; tonic, invigorating, and delicious. 4/- per lb.

These preparations may be obtained of all Chemists and Grocers. An Explanatory and Historical Pamphlet, showing the uses of the COCA LEAF, sent on application to the Sole Proprietors—

THE FRENCH HYGIENIC SOCIETY OF LONDON, 6, Conduit-street, Regent-st., W.

SUMMER TOURS in SCOTLAND.

GLASGOW AND THE HIGHLANDS

(Royal Route viâ Crinan and Caledonian Canals).—ROYAL MAIL STEAMER COLUMBA or IONA, with passengers only, sails from Glasgow daily at 7 a.m., from Greenock at 8.50 a.m., in connection with Express Trains from London and the South, for Oban, Fort William, Inverness, Lochawe, Skye, Gairloch, Staffa, Iona, Glencoe, Islay, Stornoway, &c. Official Guide 3d.; Illustrated, 6d. and 1s. Time Bill with Map and Fares free at the various offices of THOS. COOK & SON or from the owner DAVID MACBRAYNE, 119, Hope-street, Glasgow.

MRS. LABBET'S FEMALE PILLS

ARE COATED WITH SUGAR.

They strengthen and purify the system, and give a charming complexion to the palest countenance. No irregularity or obstruction can resist them. They are composed of purely

VEGETABLE INGREDIENTS ONLY.

Sent direct, post free, for 1s. 1½d. or 2s. 9d.

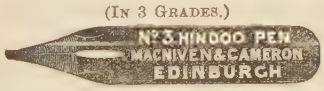
J. WARNER,

71 & 72, CHANCERY-LANE, LONDON, W.C.

"They come as a boon and a blessing to men,
The Pickwick, the Owl, and the Waverley Pen."

THE HINDOO PEN.

(IN 3 GRADES.)



"With oblique points, are inestimable."—*Oban Times.*

ASSORTED BOX OF M. & C.'s PENS, 1S. 1D. BY POST.

MACNIVEN & CAMERON, EDINBURGH.

The Lady says, "Hutton's Cambric Handkerchiefs are wonderfully cheap."

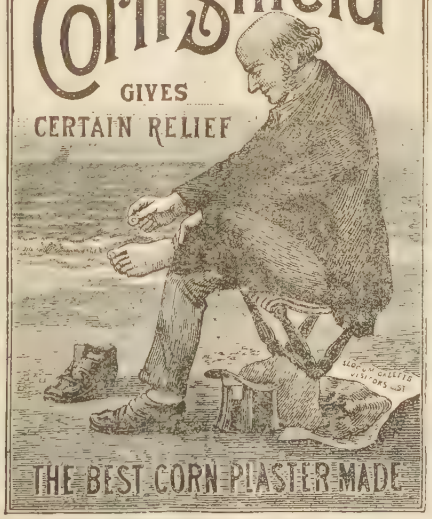
IRISH CAMBRIC POCKET HANDKERCHIEFS

	HEMSTITCHED.
Children's Size, 1/3 per doz.	
Ladies' Size, 2/3 per doz.	Ladies' Size, 2/11
Gent's Size, 3/6 per doz.	Gent's Size, 4/11

The Christian World says, "Hutton's Irish Cambric Handkerchiefs are unusually good at the price." **Samples** and price list of **Handkerchiefs and Handmade Irish Linen free** to all parts. All parcels carriage paid.—**G. R. HUTTON & CO., Larne, Belfast.**

ALLCOCK'S Corn Shield

GIVES CERTAIN RELIEF



THE BEST CORN-PLASTER MADE.

TOO FAT. DR. GORDON'S Elegant Pills

Cure STOUTNESS rapidly and certainly. State height, weight, and send 2/9, 4/6, or 11/-, to Dr. Gordon, 10, Brunswick Square, London, W.C.

THE SAFEST TONIC.

Sold by all Chemists, in Bottles (in Portable Card Case) with Drop Measure complete.

Prices 3s. and 4s. 6d. Sufficient for 3 and 6 weeks' treatment respectively.

FER BRAVAIS.

All who want IRON should try it.

LANCET.—"'*Colloid hydrate (of iron) in aqueous solution.' Neutral, tasteless. A beautiful and interesting preparation.*"

BRITISH MEDICAL JOURNAL.—"*It has all the good effects of iron without producing constipation or disturbing the digestion, and it does not blacken the teeth.*"

TOWLE'S Pennyroyal & Steel Pills

FOR FEMALES

Quickly correct all irregularities and relieve the distressing symptoms so prevalent with the sex. Boxes, 1s. 1½d. and 2s. 9d., of all Chemists. Sent anywhere for 15 or 34 stamps, by

THE LINCOLN AND MIDLAND COUNTIES DRUG COMPANY, LINCOLN.

BEWARE OF IMITATIONS.

ADVERTISEMENTS IN "HEALTH."

TARIFF PER INSERTION.

Whole Page	£5	5	0
Half Page	2	12	6
Quarter Page	1	6	6
Eighth of Page	0	13	6

Smaller Spaces pro rata.

TERMS OF SUBSCRIPTION PER ANNUM.

Including Postage in the United Kingdom, to the Continent, Canada, or the United States ...	£0	10	10
Including Postage to Australia, New Zealand, South Africa, or the West Indies	0	13	0
Including Postage to the East Indies and China, via Brindisi	0	15	2

OFFICE:

2, PATERNOSTER-SQUARE, LONDON, E.C.

Vino Tinto de Bruneto.

THE VINO TINTO DE BRUNETO, a pure, natural, full-bodied Spanish Red Wine, grown on ferruginous soil, and highly recommended for its valuable tonic properties, has been thoroughly analyzed by Mr. BENJN. NICKELS, Food Analyst for "The Confectioners' Union," &c., and has been pronounced by him free from either colouring matters, Salicylic Acid, or Free Sulphuric Acid; but containing, as it does, both Iron and Tannin, it has strong astringent properties which make it invaluable as a NERVINE tonic and DIGESTIVE when taken with meals, whilst taken with Soda or other Aërated Waters it forms a delicious invigorating drink at all times.

Pure Wine, like pure air, acts as a natural restorative, and by its stimulating and invigorating qualities tends to oxidize the blood and to assimilate the food. For this purpose VINO TINTO DE BRUNETO is unequalled. *Price 20/- per dozen. Delivered Free in London.*

Sole Agent: CHARLES ROBINSON, 61, MARK-LANE, LONDON, E.C.

NOT FARINACEOUS. MELLIN'S FOOD.

MELLIN'S FOOD for INFANTS and INVALIDS.

An artificial substitute for Mother's Milk for Infants, and a Perfect Food for Invalids. This Food is prepared from the soluble extracts of cereal grains, and, unlike the "Farinaceous Foods," is perfectly FREE FROM STARCH. It is a well known physiological fact that starchy substances cannot be digested by young children, the natural food of an infant—Mother's Milk—contains no starch, no provision is made by nature, therefore, in the case of infants for the digestion of that body. The ferments of saliva and pancreatic juice, which later become the actual agents in converting starch into grape sugar, are wanting. MELLIN'S FOOD, being free from starch, and rich in soluble Carbohydrates, Albuminoids, Phosphates, Potash, and other blood salts, forms a perfect food for young children.

TRADE MARK

ORA ET LABORA

MELLIN'S
LACTO-GLYCOSE
OR
MILK FOOD.

Price 2s. and 3s. per Bottle.

In this preparation Milk is incorporated with the Food in the process of manufacture, thus making it specially suitable where a difficulty exists in procuring fresh cows' milk, as, for instance, on board ship and in hot climates.

Sample and Prospectus on application to the Inventor and Manufacturer,

G. MELLIN, Marlboro' Works, Peckham, S.E.

INTERESTING ARTICLES.

SETS of the BACK NUMBERS of "HEALTH," containing completed Serial Articles on various important Health Topics, may be had on remitting cost of the numbers and stamps for postage.

The following subjects are treated:—

SHALL I SMOKE? In No. 231.
IS SNUFF-TAKING UNHEALTHY? In No. 218.
SOME HINTS FOR THE CURE OF FATNESS. In Nos. 213, 225.
PALPITATION AND ITS TREATMENT. In No. 216.
SCARLET FEVER. In Nos. 220, 230, 232.
DRESS AND UNDRESS. In Nos. 216, 217.
NURSING. In Nos. 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219.
HATS AS A CAUSE OF BALDNESS. In No. 215.
HOUSE CONSTRUCTION IN RELATION TO HEALTH. In Nos. 208, 210, 212, 214, 216, 218, 220, 222, 224, 226, 228, 230, 232, 234.
HEALTHY HOLIDAYS. In Nos. 223, 224, 225, 226, 227, 229, 230.
SLEEP WALKING. In Nos. 72, 73, 74, 75, 77, 79, 80.
INFANTS. In Nos. 100, 101, 102, 103, 104, 105, 106, 107.
PHYSICAL TRAINING FOR CHILDREN. In Nos. 94, 95, 96, 97, 98, 118, 119, 120, 121, 122, 123.
TRICYCLES, AND THEIR RELATION TO HEALTH. In Nos. 61, 63, 64, 65, 66, 68, 70, 71, 73, 74, 76, 78.
DIGESTION. In Nos. 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105.
WHAT TO DO WHEN FEVER INVADES THE HOUSE. In Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11.
THE HAIR, SKIN, AND TEETH. In Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14.
BURIED ALIVE. In Nos. 154, 155, 156, 157, 158, 159, 161, 163, 164.
HYDROPHOBIA: ITS NATURE, CAUSES, AND TREATMENT. In Nos. 20, 21, 23, 24, 25, 26.
CALISTHENICS. In Nos. 44, 45, 46, 47, 48, 49, 51, 52, 54, 59, 61, 62.
ECONOMICAL MEALS. In Nos. 48, 49, 50, 51, 52, 53, 54, 55, 56.
PUBLIC PARKS AND OPEN SPACES. In Nos. 57, 58, 60, 62, 64, 66, 71, 74, 76.

The price of numbers 1–156 has been increased to 4d. each, as, in consequence of the great demand for them, they are now nearly out of print. Nos. 157 to date may be had, price 2d. each.

LONDON: A. P. WATT, 2, PATERNOSTER-SQUARE, E.C.

can be no doubt that constant darkness, or even dim, diffused light, exercises an influence on the changes which take place in stored water which makes for unwholesomeness.

Thus, in stored waters, when stagnant and subjected to elevated temperatures, a great increase of micro-organisms takes place; and there are grounds for believing that micro-organisms in water may acquire or strengthen a virulency in their nature when grown under such unnatural conditions as limited air supply and absence of light.

Now, does the sanitary history of stored drinking waters support this view? I believe it does; and, moreover, it appears to me that a large proportion of the records of the connection of disease with drinking-water generally points in the same direction. With regard to stored waters, I shall bring forward briefly some of the evidence which their sanitary history furnishes:

It was observed in Alexandria in 1882 that filtered water, which had been stored for some time in old Roman tanks, proved to be more unwholesome than more impure water taken from the Mahmûdîyeh Canal and distributed in the ordinary way.

It is notorious that, of all sources of drinking water, the largest proportion of disease-producing waters is yielded by shallow wells, and in many of these wells the contents are stored under the improper conditions mentioned above.

In connection with the marked autumnal prevalence of the so-called filth diseases, it is important to point out that, at the end of the dry season, the water of shallow wells is subjected to the conditions of stagnancy and elevated temperature in their greatest intensity; and that the consequent greater deterioration of the drinking-water, which means greater multiplication of the micro-organisms which happen to be in it, may be the cause of the increased frequency of these diseases.

As is well known, a connection between the seasonal prevalence of typhoid fever and a low level of the ground-water, has been made out for many places. Prof. Pettenkofer believes that the connection is due to some influence of the low state of the ground-water on the soil; while Dr. Buchanan and Prof. Liebermeister attributed it to the greater concentration, and, therefore, greater impurity of the drinking-water derived from wells. This explanation has, however, been proved erroneous by the results of analysis, which show that the water of shallow wells becomes purer as the ground-water falls.

Now, though the drinking-water theory is thus put out of the field, there is still evidence pointing strongly to the wells being at fault; and deterioration of the water which would escape detection by the ordinary methods of examination, may be the solution of the problem.

It is universally admitted that, with regard to public supplies, the intermittent system, which necessitates the use of cisterns, is attended with more danger than the constant; and in the case of London it has proved that the water which produced typhoid fever acquires its unwholesomeness in the cisterns.

Of course cisterns may receive contamination from without, but there are few places where water will deteriorate sooner than in the dark, stagnant, and uniformly warm atmosphere in which these receptacles are generally placed.

In the laboratory here, several clearly proved cases of the production of typhoid fever by stored rain-water have come under notice, and in these cases external contamination has been excluded by analysis and other evidence.

If the experience of the use of stored rain-water abroad is looked to, it is seen that in such places as Malta, Gibraltar, Bermuda, Ascension, and Monte Video, where it constitutes the chief or sole supply, typhoid fever and intestinal disorders are endemic in a marked manner. The case of Ascension, a place where the sanitary conditions appear to approach perfection, is most striking, and the cause there of such diseases has been a perplexing and insoluble problem. An interesting point in connection with the production of disease by rain-water is that children seem to suffer most severely. I have noticed this in the case of the children at the coastguard stations, and there is a high infant mortality at Bermuda and Monte Video, while at Ascension the children suffer disproportionately from diarrhœa.

Evidence pointing to deterioration of drinking-water by storage on board ship, can also be adduced. Formerly, naval sanitarians only considered their water dangerous when it was undergoing decomposition, or, as they termed the process, "purging itself." This change in the water was an extreme deterioration, due chiefly to the wooden casks in which it was stored. Since the introduction of iron tanks the almost universal belief has been that water undergoes no change in storage which will render it unwholesome.

(To be concluded.)

Why Sixty Seconds make a Minute.—Why is our hour divided into 60 minutes, each minute into 60 seconds, &c.? Simply and solely because in Babylon there existed, by the side of the decimal system of notation, another system, the sexagesimal, which counted by sixties. Why that number should have been chosen is clear enough, and it speaks well for the practical sense of those ancient Babylonian merchants. There is no number which has so many divisors as 60. The Babylonians divided the sun's daily journey into 24 parasangs, or 710 stadia. Each parasang or hour was subdivided into 60 minutes. A parasang is about a German mile, and Babylonian astronomers compared the progress made by the sun during one hour at the time of the equinox to the progress made by a good walker during the same time, both accomplishing one parasang. The whole course of the sun during the 24 equinoctial hours was fixed at 24 parasangs, or 720 stadia, or 360 degrees. This system was handed on to the Greeks, and Hipparchus, the great Greek philosopher, who lived about 120 B.C., introduced the Babylonian hour into Europe. Ptolemy, who wrote about 140 A.D., and whose name still lives in that of the Ptolemaic system of astronomy, gave still wider currency to the Babylonian way of reckoning time. It was carried along on the quiet stream of traditional knowledge through the Middle Ages, and, strange to say, it sailed down safely over the Niagara of the French Revolution. For the French, when revolutionizing weights, measures, coins, and dates, and subjecting all to the decimal system of reckoning, were induced by some unexplained motive to respect our clocks and watches, and allowed our dials to remain sexagesimal, that is, Babylonian, each hour consisting of 60 minutes. Here you see again the wonderful coherence of the world, and how what we call knowledge is the result of an unbroken tradition of a teaching descending from father to son. Not more than about a hundred arms would reach from us to the builders of the palaces of Babylon, and enable us to shake hands with the founders of the oldest pyramids, and to thank them for what they have done for us.—*Max Muller, in the "Fortnightly Review."*

Public Health

"Health is the first Wealth."—*Emerson.*

RELATIONS OF INCREASE OF POPULATION TO MUNICIPAL SANITATION.

It is well known to statisticians, says a contemporary, that cities, especially in this country, have been for the last fifty years increasing in population much faster than the rural districts, notwithstanding their higher death-rates. The average annual rate of increase varies greatly for different cities, being from 2·5 to 6 per cent. in this country, and from 1·5 to 3 per cent. in English, French, and German cities. The rate of growth, both as to increase of area within the municipal limits and increase of density of population, is of much interest to the municipal engineer in planning works for water-supply, sewerage, &c., and has been made the subject of several papers by Emil Kuichling, which have been published in the *Post Express* of Rochester, N.Y.

The immediate object of Mr. Kuichling's studies was the determination of the proper size for a trunk sewer in that city, and as this depends on the number of people, the amount of their water-supply, and the area covered by houses, and by streets, yards, &c., which are nearly impervious to rainfall, it is evident that to make proper provision for the condition of things thirty years hence requires a careful consideration of some problems of vital statistics, as well as those of meteorology and engineering.

For example: In 1880 Rochester contained 1·46 dwellings per acre, each dwelling containing an average of 5·45 persons per dwelling, giving an average density of population of 8 per acre. As the average number of persons per acre in London is 56, in Berlin 90, in Liverpool 114, and in Paris 121, it is evident that there must be a good deal of unoccupied space at present in Rochester.

He states that in cities like Rochester it has been customary to provide for an average density of from 30 to 40 persons per acre; in Buffalo a density of 40 was adopted for some of the large outlet sewers; in Providence the assumed density was 50; in Boston, 60; in New York and Brooklyn, 70. Taking the older and more densely settled districts of the city, with an average population of about 32 per acre, he states that about 18 per cent. of the area is occupied by roofs, 16 per cent. by sidewalks and pavements, and 25 per cent. by hard earthen surfaces from which the drainage is discharged into the sewers, and from which he estimates that 20 per cent. of the rainfall will thus pass. With a population of 50 per acre 55 per cent. of the area is considered as impervious surface; with 15 persons per acre 14 per cent. is taken as impervious surface. These computations are probably not based on very accurate data, and if they were they would apply only to the particular locality for which they were made; but they indicate some of the considerations which influence an engineer in advising with regard to dimensions, &c., of an outlet sewer which is to serve a growing city for 30 or 40 years to come.

Special Notice.—The best stimulant for dietetic and other purposes is the "Skerryvore" (Registered) Blend of Fine Matured Scotch Whiskies, certified of the utmost purity by Mr. E. G. Clayton, F.C.S., Member of the Society of Public Analysts. Sold only by John Twatt, 36, Argyle-place, Edinburgh. Price 20s. per gallon, bottles and cases included.—[Advt.]

Jottings from the Journals

"Th' ingredients of health and long life are
Great temperance, open air,
Easy labour, little care."—*Sir Philip Sydney.*

Mental Contagion.—The illustrious French philosopher Esquirol first clearly defined, under the term "moral contagion," that in the study of mental phenomena there may be detected variations of action, and divergencies from the ordinary or natural conditions, which are excited by contagion, in the same way as physical derangements are excited by physical contagions. Despiné, of Marseilles, who in many respects may be compared with his great master, Esquirol, has followed this line of study with wonderful success, and has given to us a history of moral contagion which claims the attention of every social scholar. For my part, I like and approve of all that these teachers teach, except the term they use to set forth their argument. I prefer the term mental contagion to that of moral contagion. Moral contagion I cannot conceive as conveying any sense of variation from a standard health of the mind, and any contagion moral in its nature would to me indicate a contagion that was good, and contrary, in its nature, from the idea of contamination usually connected with the word contagion. I, therefore, choose the term "mental contagion" as being more to the point, and as most in accord with the commonly accepted expression. We will study this division of our subject under that title. The unhealthy mind affected by mental contagion presents itself, when it is carefully observed, over a much more extended field than is generally supposed. It is, in fact, a representation of a series of phenomena so widely spread that its very extent is a cause of its obscurity: we are so familiar with it that we do not recognize it; we are so familiar with its results that we come to look on them as occurrences sufficiently common and natural to be unavoidable. It is only when we are critical in our analysis that the obscurity begins to pass away, and the character of the phenomena appears in all its clearness and extensiveness. When these phenomena are recognized, it is astonishing how contagious affections of mental origin are seen to resemble in their course those arising from simple physical contagions. Sometimes they take a spreading or epidemic character, after the manner of the so-called catching diseases with which we are most familiar, and are seen to widen into great epidemic outbreaks, extending over large tracts of country, and causing the strangest of effects known in history. One of these marvellous outbreaks of mental contagious disease, not to name any more, was the dancing mania of the fourteenth century, during which assemblages of men and women who had come out of Germany to Aix-la-Chapelle, united by one common delusion, formed circles, hand in hand, and, appearing to have lost all control over their senses, continued dancing, regardless of the bystanders, for hours together, in wild delirium, until at length they fell to the ground in a state of utter exhaustion, panting, senseless, and labouring for breath, yet not infrequently rising, after a rest, and continuing the motion until, in many instances, they died from the effort. At other times these outbreaks from mental contagion, in which one victim has followed another, have taken what, in regard to more ordinary known diseases, is called the sporadic form—that is to say, have been developed, or have broken out, in some particular locality, and have not extended beyond the

boundaries of the locality. An outbreak of a convulsive type, arising from fear, once occurred at a manufactory at Hodden Bridge, in Lancashire, in which outbreak over twenty persons, taking the contagion from one individual, were attacked most severely, but without communicating the affection beyond the place where it broke out.—*Dr. Richardson.*

The Swimming-Bath in London.—That London is very inadequately provided with swimming-baths, no one we imagine will deny, and it is not a little strange that no attempt should be made to supply a need so obvious and so pressing. This is not a question of hygiene alone. The swimming-bath affords, even as matters stand, a very popular form of recreation, and one capable of being made much more popular than it is; for, with a few exceptions, the swimming-baths of the metropolis, few as they are, are even more conspicuous for their bad equipment and condition than for their paucity in numbers. With many of them bad condition is an inevitable consequence of bad design. Limited space, deficient light, imperfect drainage, inadequate ventilation, and a squalid absence of decoration are the vices which beset the most of them. The would-be bather enters from the open air and sunlight, and passes usually by more or less devious passages to an apartment dimly lighted and redolent of human emanations, where he finds a fairly large tank filled with tolerably clean water. Along its edge runs a narrow causeway, probably of bare and slimy boards, possibly carpeted with sodden matting. Opening on the causeway is a row of narrow cubicles, of which the best that can be said is that they are as commodious as sentry-boxes and very nearly as sightly. A diving-board completes the equipment. Such is the dreary interior of an average London swimming-bath. When it is added that the thirty baths of this class which are distributed over the metropolitan area are located very much at haphazard, sometimes in the near neighbourhood of one another, it will be seen that large districts, making up in fact by far the greater part of the area, are in effect unprovided with this convenience. Some years ago the deficiencies of the suburban parts were very usefully supplied—in part, at least—by a floating swimming-bath upon the Thames, conveniently situated near Charing-cross. For some reason this bath has disappeared, nor has its place been taken by anything else of the same kind, although the amount of patronage which it received might have been expected to secure a better fate.—*Lancet.*

Palgrave, in his work on Central and Eastern Arabia, mentions a plant whose seeds produce effects analogous to those of laughing gas. The plant is a native of Arabia. A dwarf variety is found at Kasum, and another variety at Oman, which attains a height of from three to four feet, with woody stems, wide-spreading branches, and light green foliage. The flowers are produced in clusters, and are yellow in colour. The seed pods contain two or three black seeds of the size and shape of a French bean. Their flavour is a little like that of opium, the taste is sweet, and the odour from them produces a sickening sensation and is slightly offensive. These seeds, when pulverized and taken in small doses, operate upon a person in a very peculiar manner. He begins to laugh loudly and boisterously, and then sings, dances, and cuts up all kinds of fantastic capers. The effect continues about an hour, and the patient is extremely comical. When the excitement ceases, the exhausted individual falls into a deep sleep, which continues for an hour or more, and when he awakens he is utterly unconscious that any such demonstrations have been made by him.

IMPORTANT ANNOUNCEMENT.

BONUSES TO SUBSCRIBERS TO "HEALTH."

Health, as our readers are aware, may be obtained of all Booksellers and Newsagents, and at the Railway Bookstalls, on the day of publication. It may also be ordered from the Publisher, 2, Paternoster-square, London, E.C., who will send the journal, post free, for a year, on receipt of postal orders for 10s. 10d.

As many of our readers who live in remote districts prefer to obtain Health from the Publisher direct, and as we are desirous of increasing the already large number of subscribers who give us a yearly order for the journal, we offer the following Free Gifts and Bonuses to all who subscribe to Health for one year or longer:—

(1.) To each Subscriber who remits 10s. 10d. to the Publisher, entitling him (or her) to receive one copy of Health, post free, for one year, we shall present a copy of Dr. Andrew Wilson's work, entitled "A Manual of Health Science" (Longmans & Co.), value 2s. 6d.

(2.) To each subscriber who remits 21s. 8d., entitling him or her to receive two copies of Health weekly, post free, for one year (or one copy for two years), we will present Dr. Richardson's "Ministry of Health" (Chatto & Windus), value 6s. The copies of Health so ordered may be posted to separate addresses.

(3.) To each person who subscribes 32s. 6d., for three copies of Health, post free, weekly, for one year, we will present the volume by Dr. Richardson mentioned above, and also the handsome, illustrated book entitled, "Studies in Life and Sense," by Dr. Andrew Wilson (Chatto & Windus), value 6s.—being a free gift of the total value of 12s.

The bonus last mentioned will also be presented to anyone who succeeds in obtaining three yearly subscribers to Health, and who remits to the Publisher the sum of 32s. 6d., together with the names and addresses of the persons to whom the copies are to be posted each week.

As the literary gifts above-mentioned constitute books containing solid and reliable information regarding health and other matters of popular scientific interest, it will be seen that the above scheme, while intended to increase our already large circulation, also offers distinct advantages to new subscribers who guarantee by their subscriptions a year's support to this journal. All communications regarding subscriptions and other purely business details connected with Health should be addressed directly to the Publisher, 2, Paternoster-square, London, E.C., and *not to the Editor.*

Established 1813.

GRANT'S SCOTCH OAT-FLOUR.

"It is a high-class manufacture of full nutritive value, and can be used either by itself or as an adjunct to many other foods. For children and for invalids, Grant's Scotch Oat Flour is specially suitable, and has been found in our experience to prove highly useful in cases in which ordinary oatmeal or coarser flours could not be used. We have, therefore, pleasure in endorsing our former commendation of this preparation as a most useful food-product equally for those in sickness and for those in health."—Ed. "Health."

Awarded Two Gold Medals, Two Silver Medals, and One Bronze Medal.

PROPRIETOR AND MANUFACTURER:

JOHN GRANT, Works, Craig Mills, Dundee.

WHOLESALE AGENTS:

F. NEWBERY & SONS, 1 and 3, King Edward Street, Newgate Street, London, E.C.

"ELECTRICITY IS LIFE."
(TRADE MARK.)

PULVERMACHER'S

WORLD-FAMED

GALVANIC BELTS,

FOR the CURE of NERVOUS DISEASES,
HAVE RECEIVED TESTIMONIALS from
THREE PHYSICIANS to
HER MAJESTY the QUEEN,
THE ACADÉMIE DE MÉDECINE of Paris and
FORTY MEMBERS of the
ROYAL COLLEGE of PHYSICIANS of LONDON.

RECENT TESTIMONIALS.

GALVANISM *v.* RHEUMATISM.

109, Ingfield-road, East Grinstead, 7th August, 1889.

Dear Sir,—I have great pleasure in stating that the Galvanic Belt I purchased from you for my wife, who was suffering from Rheumatism, has acted most satisfactorily in every way.

I have recommended your treatment to several of my friends for the cure of Rheumatics, and I only hope they may reap the same benefit my wife has done.—Yours respectfully, E. S. SMITH.

Mr. J. L. Pulvermacher, 194, Regent-street, W.

GALVANISM *v.* RHEUMATISM.

203, Corfield-street, Bethnal-green-road, London, 22nd July, 1889.

Dear Sir,—I consider your Galvanic Belts are worth their weight in gold, and I shall always recommend them to my friends. I have entirely recovered the use of my leg; and my mother, who is seventy-three years of age, has been cured of rheumatism. I cannot speak too highly of your treatment, which has been a blessing to my whole family, and some friends in Lowestoft tell me they would not be without one of your Belts in the house for any money.—Yours respectfully, (Mrs.) A. THURSTON.

Mr. J. L. Pulvermacher, 194, Regent-street, W.

GALVANISM *v.* SEVERE PAIN AND EXHAUSTION.

Stratton, Cornwall, 16th July, 1889.

Dear Sir,—I am happy to inform you that the patient for whom I purchased your Galvanic Belt experienced most decided relief from pain in twenty-four hours, and has since continued to progress. Before trying your treatment the patient was in a state of continual pain, at times agonizing, and we felt life could not much longer endure the strain. The patient is also greatly improved in general health, and is wonderfully better in every way. Privately I shall be willing to answer inquiries—stamped envelope being enclosed.—Yours faithfully, W. R. H. WILLETT.

Mr. J. L. Pulvermacher, 194, Regent-street, W.

GALVANISM *v.* NERVOUS DEBILITY & HEADACHE.

Alvaston, Derby, 6th July, 1889.

Gentlemen,—I am pleased to say that I have derived great benefit from your Galvanic treatment, and when talking to any one in our town or wherever I may be, I always recommend you, because I have now proved your Galvanic Belt to be the best remedy for nervous headache and nervousness generally that I have ever tried.—Yours very truly, W. S. WOODWARD.

Messrs. Pulvermacher & Co., 194, Regent-street, W.

GALVANISM *v.* LOCAL WEAKNESS.

Finchley, near London, June 23rd, 1889.

Dear Sir,—In October last you supplied me with a Chain Battery Combined Band and Belt, from which it is no exaggeration to say I experienced relief in a few days, and in five months was completely cured of the local weakness from which I was suffering for more than three years. I had tried various remedies without effect, but your method operated at once. It is simple, natural, and safe, and I only wish the thousands who, it is grievous to think, are suffering from these dire maladies, could hear of and give a a trial to your treatment.

Allow me to thank you again most sincerely for the kindness which you personally showed me at a critical and perplexing moment. I shall not easily forget it, but doubtless you are compensated by that generosity of heart which brings its own reward. I enclose my card, and you are at liberty to publish this and to refer any one to me privately, but I particularly desire my name to be suppressed publicly.—Gratefully yours, "Z."

Mr. J. L. Pulvermacher, 194, Regent-street, W.

GALVANISM *v.* SCIATICA.

Donnington House, Stow-on-the-Wold, June 22nd, 1889.

Dear Sirs,—I am pleased to say that the combined Electric Band you sent me for Sciatica has quite cured me.—Dear Sir, yours truly,
GEO. WHITFIELD.

J. L. Pulvermacher & Co., 194, Regent-street, W.

GALVANISM *v.* NERVOUS EXHAUSTION.

The distressing symptoms of NERVOUS EXHAUSTION, LOSS of MUSCULAR POWER, RHEUMATISM, SCIATICA, PARALYSIS, EPILEPSY, &c., are speedily removed by means of PULVERMACHER'S world-famed GALVANIC BELTS, which convey the electric current direct to the affected parts, gradually stimulating and strengthening all the nerves and muscles, and speedily arresting all symptoms of premature waste and decay.

ADVICE PERSONALLY or by LETTER, free of charge.

FOR FURTHER TESTIMONIALS, both Medical and Private, see new Pamphlet, "GALVANISM: NATURE'S CHIEF RESTORER OF IMPAIRED VITAL ENERGY," post free on application to

J. L. PULVERMACHER AND CO.,
GALVANIC ESTABLISHMENT,
194, REGENT-STREET, LONDON, W.
(ESTABLISHED OVER FORTY YEARS.

Our Letter-Box

"Conference [maketh] a ready man."—*Bacon.*

NOTICES TO CORRESPONDENTS.

All Communications for the Editorial Department (including Books for Review, Specimens of Sanitary Appliances, &c.), to be addressed to "THE EDITOR OF HEALTH," 2, PATERNOSTER-SQUARE, LONDON, E.C. *Those intended for the Publishing Office to be sent to* MR. A. P. WATT, THE PUBLISHER, *at the same address.*

RULES FOR CORRESPONDENTS.

OWING to the mass of letters which reaches us each week, we respectfully direct the attention of Correspondents, desiring replies in the LETTER-BOX DEPARTMENT of HEALTH, to the following rules:—

1. All questions are answered free of charge in the columns of HEALTH. A limited space only, is available for the insertion of replies each week.
2. All letters must be legibly addressed to "The Editor of HEALTH, 2, Paternoster-square, London, E.C.," *and to no other address.*
3. Questions to which answers are desired by post, are so replied to solely at the Editor's discretion. If no answer is sent by post, the query will be replied to in the "Letter-Box" columns of HEALTH. A stamped addressed envelope must accompany all queries to which a private reply is desired.
4. Addresses of physicians and surgeons will, as heretofore, be forwarded FREE to Correspondents on their enclosing a stamped addressed envelope for reply.
5. Correspondents are requested to write on one side of the paper only, and to make their inquiries as brief as may be consistent with clearness.
6. From the necessity of sending HEALTH to press early in the week, no Correspondent can be replied to in the "Letter-Box" columns in the same week in which the inquiry is received. Replies crushed out of any issue will be found in the succeeding number.
7. No Post Cards must be used in sending queries. Violation of this rule deprives the sender of the privilege of a reply.

QUERIES AND ANSWERS.

REPLIES: GENERAL, SANITARY, AND MEDICAL.

F. H. WILLIAMS.—1. The pamphlet you send us is of the usual order of empirical systems, and we cannot counsel you to undergo any such treatment, which is in no sense superior or equal to ordinary treatment. 2. Send us the article and we will judge of its suitability for our pages.

SHAKY.—Read the pamphlet "A Lecture to Young Men" (post free, 5th edition, for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and you will find full directions therein. Avoid constipation, as directed in its pages.

M. T. A.—Forward us a stamped directed envelope, and we will reply to your queries.

S. ATKINSON.—Follow advice given to "G. S." in last week's HEALTH; and to avoid constipation, use the diet, &c., recommended to "Bear" in our last issue.

A. ALEXANDER.—You might try the carbonate of lime as directed; but you should endeavour to procure the oyster-shells, as directed by the treatment to which allusion was made in HEALTH.

ENQUIRER.—Use hot fomentations at night, and take a dose of castor oil occasionally as a mild aperient. Avoid indigestible foods, and write again if not cured.

CHANCERY 2.—In such a case we would advise you to treat the patient largely by giving peptonized milk and other foods, which can be so readily peptonized (as described in frequent articles in our pages) by means of Fairchild's Powders (Burroughs, Wellcome & Co.'s). In addition, we should administer strong soups made with Brand's Beef Essence, or give that essence in teaspoonfuls cold, out of the tin. This will suffice largely for the nourishment of the patient; but such a case, in addition, demands careful medical supervision. We can send you address of a physician you may consult with advantage, if you forward stamped addressed envelope.

J. P.—You will find full information regarding your case, and treatment therefor, in the pamphlet recommended to "George R." in the present number. There is no need for you to be in any way alarmed.

Peter McIntyre.—Not natural. Wash the parts regularly with Vinolia Soap, and apply Vinolia thereafter as an ointment, night and morning. Any good druggist in your city will supply you with Vinolia.

Mater.—1. Not exactly: only approximately—say, by the number of teeth which have appeared. 2. You cannot be at all sure (in the absence of disease, that is) until after the age of fifty or so. 3. We should recommend Forsyth's Hygienic Underwear (17, Renfield-street, Glasgow): write for a price list. There can be no objection to the material you name.

H. Anderson.—You would be very foolish if you thought for a moment of taking any such stimulant. Let your desires and work be regulated strictly by your strength, and remember that oversatiety can only result in pain. If you feel the need of any tonic, take a wineglass of Vin Mariani twice daily, after your meals.

Scotsman.—See and follow advice given to "Peter McIntyre" above; and write again if the patient is not cured.

Omega.—Continue the tonic yet awhile, but lessen your dose gradually, both as to amount and frequency, and let us hear the result.

Thankful.—You might try the first prescription you have by you; only it is not absolutely necessary. Try the remedies we recommended first of all.

Pim.—See the advice given to "Peter McIntyre" above. If the pimples are "blackheads," press them out before they inflame, and sponge the part thereafter with toilet vinegar or Bayley's Eau de Cologne. After your meals take fifteen drops Fer Bravais, in a little water, thrice daily.

G. F. A.—We should say "not likely"; but you can test the case for yourself. Try Van Houten's Cocoa instead, for a time, and note the result.

Himrod.—The proper appliance for your ailment may be purchased at 52, Oxford-street, London, W. Call there and be measured for a truss.

B. Alexander.—Write to Mr. Pulvermacher, 194, Regent-street, London, W. He will advise you as to the use of a belt. The man you have paid so much money to has simply swindled you.

E. S.—Try the following tonic:—Ammonio-citrate of iron, a drachm and a half; spirit of sal volatile, three drachms; chloric ether, one drachm; syrup of tolu, three drachms; camphor julep, seven ounces. Label—"Two tablespoonfuls thrice daily, after meals."

Grange.—Try the effect of taking a teaspoonful of Syrup of the Hypophosphites in a wineglass of water, twice daily, an hour before your food. This will brace you up, and effect a needed improvement in your condition. Have a little finely powdered dry boracic acid blown carefully through a tube into the ear at night; and, of course, avoid colds and chills. Do not wear cotton wool in the ear.

George R.—Read the pamphlet, "A Lecture to Young Men," (post free, 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and you will find your questions fully replied to therein.

Sailorman.—Wash the feet night and morning in tepid water, in which Tidman's Sea Salt has been dissolved, and thereafter rub a little benzoated lard on the feet.

A. F.—If the cracks in the hands are of long standing, use an ointment composed of red oxide of mercury, fifteen grains; lard, one ounce. Mix.

M. Fox.—A cure for insect, bugs, &c., is said to be made by mixing two ounces of camphor, four ounces of spirits of turpentine, one ounce of corrosive sublimate (poison) and one pint of alcohol. This mixture is to be applied to the bug-infested places, and to be labelled "Poison."

Henry Green.—Try the hair-lotion ordered to "Canty Bay" in Health No. 332; and if this does not cure the falling off, write again. Use a soft brush only, and avoid all small and hard combs.

P. A. Cole.—1. There is no good popular manual on dyspepsia published, as far as we know; but Messrs. Churchill, 11, New Burlington-street, London, W., might send you their catalogue, and you could see therein if any likely volume was mentioned. 2. An emetic certainly, unless contra-indicated by any inflammatory conditions. 3. You may take the Chlorodyne thereafter; but why not try it first of all? 4. There could be no harm whatever in trying the battery in your case. 5. Bismuth should be tried; but five drops of Pure Terebene taken on a piece of sugar is the best remedy for flatulence. 6. Pavy's volume on "Food and Dietetics," published by Churchill, is the best. You should try peptonizing milk with Fairchild's Powders when you are troubled with your symptoms.

M. Bewley.—Show your doctor the article on "Chrome Yellow Poisoning" in Health, and let him read it; and be guided by him thereafter in the treatment of your case. It is most undesirable and dangerous that you should lick the stamp you work with, and this practice has likely injured your health.

G. S.—Cocaine is the active principle of the coca plant. The newspaper paragraph you sent applies only to an excessive use of the former. Coca wine may be safely taken, in moderation, without any possibility of evil effect. It is an excellent stimulant.

L. J. C.—Your symptoms point to a disordered digestive system. Avoid suppers, and brush your teeth night and morning with Bunter's Puriline Paste, and after your meals wash your mouth with Puriline Tooth Wash. Use Bayley's Spermaceti Soap (17, Cockspur-street, London, S.W.), but avoid all ordinary face-washes and powders; these only injure the skin. If you wish our further advice, send a fuller account of food, habits, age, &c. Rowland's Kalydor is an excellent face-application for sunburn, &c.

A Student of Health.—We cannot suggest anything, save to recommend you to be more manly and to educate yourself out of your gloomy thoughts. Take a holiday by the sea for a week or two, and this will brace you up. You only need cheerful company, fresh air, and exercise.

Tried Doctor.—Use a Chloride of Ammonium Inhaler regularly (Burroughs, Wellcome & Co.'s), and have your throat painted night and morning with glycerine and tannin, with which any druggist will provide you. Take also a teaspoonful of Inman's Syrup of the Hypophosphites twice daily, in a wineglass of water, after your meals.

Sourd.—Apply to Messrs. Lindsay & Co., Ludgate-hill, E.C., or to Krohne & Sesemann, Duke-street, Manchester-square, W.

EIGHT FIRST CLASS EXHIBITION AWARDS.

SCOTT'S For Infants, Children, and Persons of Weak Digestion.

MIDLOTHIAN

"Unequalled" OAT-FLOUR.

SOLE MAKERS—

A. & R. SCOTT, Limited, KINGSTON, GLASGOW; & 15A, FINSBURY-SQ., LONDON.

Export Agents: BOYACK & CO., 88, Bishopsgate-street, E.C.

SCOTT'S MIDLOTHIAN OAT-FLOUR.—There is no preparation which can be assimilated with greater facility than such a flour as this. Those who suffer from indigestion might substitute for their ordinary breakfast materials this flour, prepared according to the recipe given by Messrs. Scott, and printed on the tins.—HEALTH.

CECILE.—Use an eye lotion made by adding one grain of the sulpho-carbolate of zinc to an ounce of rose water. Dilute at first with an equal part of tepid water.

AMOR.—Try hot and cold water douches played alternately on the strained part, twice or thrice daily; and wear a Martin's bandage at night. The cold sponge bath (not wetting the head) each morning is preferable to all other modes.

A. SHARPE.—Go to a physician and undergo a thorough examination. This is the only satisfactory method of obtaining a reliable opinion regarding the matter you write about. We can send you address of a physician, if required, on receipt of stamped addressed envelope.

ROCKINGHAM.—A very few minutes—that is, sufficient time to sponge yourself thoroughly—should suffice. Do not wet your head at all. This is a frequent source of hair-weakness and baldness in those who take cold baths.

M. TAIT.—Try fifteen drops Fer Bravais, thrice daily, in water, after your meals. This will restore your tone; the loss of which is due possibly to overwork or want of exercise.

GLASGOW.—Read the Ambulance Handbook—"Common Accidents, and How to Treat Them"—by Dr. Andrew Wilson, and others, price 1s. 2d., post free, from Chatto & Windus, 214, Piccadilly, London, W., or order of any bookseller.

O. S.—You might try Bunter's Dentine for your teeth. It is easily applied. Use Bunter's Puriline Tooth Polish (see advertisement in our pages).

Tired Brain

Horsford's Acid Phosphate,

A brain food. It increases the capacity for mental labour, and acts as a general tonic. It rests the tired brain, and imparts thereto new life and energy.

Dr. ED. T. JOHNSON, M.R.C.S., 121, Rice-lane, Walton, Liverpool, says: "I have used it with very good results in cases of overtaxed and overworked brains, one in particular, a schoolmaster, where it acted like a charm."

Dr. JNO. LAMBE, M.R.C.S., West Villa, Shurdington, No. Cheltenham, says: "It produced good results in sick headache and brain prostration, tranquillizing the irritation, giving comfortable sleep."

Descriptive pamphlet post-free on application to

Rumford Chemical Works, Providence, R.I., U.S.A.

Beware of Substitutes and Imitations.

CAUTION.—Be sure the word "Horsford's" is printed on the label. All others are spurious. Never sold in bulk.

STATIM.—The cure for tape-worms is the following: Take no food for eight hours; then in the evening take the following draught: Extract of male fern, thirty minims; powdered gum acacia, one drachm; peppermint water, one ounce; make an emulsion. Next morning take a full dose of castor oil, and about midday a large plate of mashed potatoes. The minute head of the worm is the part which requires to be brought away. Repeat the treatment if symptoms of the worm should show themselves at a subsequent period.

ALGUS.—Have a pill prepared containing one grain permanganate of potash, to be made up with Kaolin. Take one of these pills twice daily after your food, and let us hear the result after a brief trial of this remedy.

MARKER.—For your skin-affection you should try Vinolia as an outward application, and wash with Vinolia Soap (Roberts & Co., 76, New Bond-street, London, W.). A course of La Bourboule Mineral Water (Ingram & Royle) will also be found useful. Use the Water as directed on the bottle.

S. G.—Brush the hair regularly, night and morning, with a soft brush, and rub in a little of the following to the roots each morning:—Eau de Cologne, two ounces; tincture of cantharides, two drachms; oil of rosemary and oil of lavender, of each, ten drops. Mix. Label: "The Hair Lotion."

NIMBLE.—The following is an iron and quinine mixture, which may do good:—Sulphate of quinine, eight grains; sulphate of iron, sixteen grains; dilute sulphuric acid, eight minims; water to eight ounces. A tablespoonful thrice daily.

A. T.—Lamplough's Pyretic Saline is the best of saline aperients. Take a dose each morning for a few days.

R. JONES.—The skin is deficient in its action. Try the Oriental Aromatic Salts (advertised in our pages), which should be added to the water with which you wash. Use Bayley's Spermaceti Soap, 17, Cockspur-street, Pall-mall, S.W.

E. R.—Read the pamphlet, "A Lecture to Young Men" (post free, for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and follow out the advice it gives.

PLATO.—Any chemist will supply you with a corn solvent, which is to be applied to the corn, and the latter to be pared occasionally. Mr. Martindale, of New Cavendish-street, London, W., will supply you with such a solvent.

ALARMIST.—Mellin's Food is the proper diet for your child. The food you are now using is starchy, and is, therefore, practically a poison to the child under eight months old. Mellin's Food is the best you can use.

GRANGE.—The only true cure for fatness is by diet. Read Dr. Andrew Wilson's article on "Fat and Fat Cures" in *Longman's Magazine* for December last, and also an article on that topic in HEALTH, No. 280, to be had of the Publisher.

SEX.—Send us stamped addressed envelope, and we will forward the address of a specialist who removes superfluous hairs by means of electricity.

OLIVER S.—Be careful in your diet, and avoid vegetable foods when your symptoms trouble you; and take twenty drops of Collis Browne's Chlorodyne in a little water when the pain is severe, repeating the dose in four hours, if necessary.

EDWARD RAE.—Apply to the French Hygienic Society, 6, Conduit-street, London, W., who will advise regarding a harmless hair-dye.

PRIMROSE.—Read the article in HEALTH, No. 199 (to be had from the Publisher, post free, for 4½d.), and read the article on acne and how to cure it. This will guide you as to the treatment of your ailment; and take internally fifteen drops Fer Bravais, after food, in water, twice daily.

M. F.—Wash the parts daily with tepid water and coal-tar soap, and thereafter rub a little mercurial or blue ointment on the affected parts.

E. BANNER.—Brush the hair regularly night and morning with a soft brush, and rub in a little of the following to the roots each morning: Eau de Cologne, two ounces; tincture of cantharides, two drachms; oil of rosemary and oil of lavender, of each ten drops. Mix. Label: "The hair lotion."

LENZIE.—Try five drops Pure Terebene on a piece of sugar when your symptoms are present. Take also a couple of Cascara Tabloids, between meals every other day for a week.

OTTO.—Take half a Dahl's Cake morning and night in your tea. Substitute Grant's Oat Flour for tea at night, and between your meals, once daily, take Cascara. The most convenient form is in the shape of the tabloids made by Messrs. Burroughs, Wellcome & Co., and to be had of any druggist.

FAIRPLAY.—Try the following lotion: Bicarbonate of soda, one drachm; glycerine, an ounce and a half. Mix. Apply the lotion after washing. If this lotion does not cure your ailments, substitute for it the following: Pulv. calamin. ver., two drachms: pulv. oxid. zinc, one drachm; glycerine, one drachm; aquæ camphor. ad., six ounces. Mix. Label: "For external use only."

S. E. M.—Inhale, at bedtime, the vapour of a pint of hot water to which a little "Sanitas" Fluid has been added. After your meals, take a dessertspoonful of Scott's Cod Oil Emulsion with Hypophosphites, thrice daily, as a general strengthening measure. Cold sponging to the chest will also be found useful each morning

ROBIN HOOD.—Read the pamphlet, "A Lecture to Young Men" (post free, 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and note what is therein said regarding the treatment of your case.

C. GRAVES.—A hair-wash which is not greasy in its nature may be made as follows: Glycerine, four ounces; tinct. cantharides, four drachms; liquor ammonia, four drachms; rose water, concd., two ounces; bay rum, ten ounces.

PARTON.—Read the pamphlet, "A Lecture to Young Men" (post free, 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and follow out the rules it gives for cases like yours.

APPREHENSIVE NERVOUSNESS.

Debility, Rheumatism, Gout, Sciatica, Torpid Liver, Kidney Disorders, and every form of weakness may be speedily cured by wearing

HARNESS' ELECTROPATHIC BELT.

It generates a mild continuous current of Electricity.

Produces no Shock or Discomfort whatever. Testimonials, Pamphlet and Advice free, personally or by letter.

Write at once to **Mr. C. B. Harness,** Consulting Electrician, **MEDICAL BATTERY Co. Ltd.**

52, OXFORD ST. LONDON, W.

(Corner of Rathbone Place.)

KRONENQUELLE.

The famous Mineral Water for the treatment of

GOUT, GRAVEL, RHEUMATISM, &c.

PAMPHLETS FREE BY POST.

W. SCHACHT & CO., 26, FINSBURY-PAVEMENT

AND

ROYAL HOTEL BUILDINGS, VICTORIA EMBANKMENT, LONDON, E.C.

ESTABLISHED 1825.

NEAVE'S FOOD

FOR INFANTS, INVALIDS, AND THE AGED.

BEST AND CHEAPEST.

Demy 8vo, with One Plate, price 1s.

BOARD SCHOOL LARYNGITIS.

BY

GREVILLE MACDONALD, M.D. LOND.,

Physician to the Throat Hospital, Golden-square, W.

LONDON:

A. P. WATT, 2, PATERNOSTER-SQUARE.

Order "HEALTH" from your Newsagent.

TERMS OF SUBSCRIPTION.

Yearly, including home postage, postage to the Continent, Canada, or the United States, 10s. 10d.; Six Months, 5s. 5d.; Three Months, 2s. 8½d.

Cheques and Post Office Orders to be made payable to the Publisher A. P. WATT.

CHATTO & WINDUS'S CHEAP EDITIONS OF POPULAR NOVELS.

PICTURE COVERS, PRICE TWO SHILLINGS EACH.

By JAMES PAYN.
Lost Sir Massingberd
A Perfect Treasure
Bentinck's Tutor
Murphy's Master
A County Family
At Her Mercy
A Woman's Vengeance
Cecil's Tryst
Clyffards of Clyffe
The Family Scapegrace
Foster Brothers
Found Dead
Best of Husbands
Walter's Word
Halves
Fallen Fortunes
What He Cost Her
Humorous Stories
Gwendoline's Harvest
£200 Reward
Like Father, Like Son
Marine Residence
Married Beneath Him
Mirk Abbey
Not Wooed but Won
Less Black than We're Painted
By Proxy
Under One Roof
High Spirits
Carlyon's Year
A Confidential Agent
Some Private Views
From Exile
A Grape from a Thorn
For Cash Only
Kit: A Memory
The Canon's Ward
Talk of the Town
Holiday Tasks

By GEORGE AUGUSTUS SALA.
Gaslight and Daylight

By E. C. PRICE.
Valentia
Mrs. Lancaster's Rival
Gerald
The Foreigners

By CHARLES READE.
It is never Too Late to Mend
Hard Cash
Peg Woffington
Christie Johnstone
Griffith Gaunt
Put Yourself in His Place
The Double Marriage
Love Me Little, Love Me Long
Foul Play
The Cloister and the Hearth
The Course of True Love
Autobiography of a Thief
A Terrible Temptation
The Wandering Heir
A Simpleton
A Woman-Hater
Singleheart and Doubleface
Good Stories of Men and Other Animals
Readiana
The Jilt

By Mrs. J. H. RIDDELL.
Her Mother's Darling
Prince of Wales's Garden Party
Weird Stories
Fairy Water
The Uninhabited House
The Mystery in Palace Gardens

By F. W. ROBINSON.
Women are Strange
The Hands of Justice

By JAMES RUNCIMAN.
Skippers and Shellbacks
Grace Balmaign's Sweetheart
Schools and Scholars

By W. CLARK RUSSELL.
Round the Galley Fire
On the Fo'k'le Head
In the Middle Watch
A Voyage to the Cape

By BAYLE ST. JOHN.
A Levantine Family

By JOHN SAUNDERS.
Bound to the Wheel
One Against the World
Guy Waterman
Two Dreamers
The Lion in the Path

By KATHARINE SAUNDERS.
Joan Merryweather
Margaret and Elizabeth
The High Mills
Heart Salvage
Sebastian

By GEORGE R. SIMS.
Rogues and Vagabonds
The Ring o' Bells
Mary Jane's Memoirs
Mary Jane Married

By ARTHUR SKETCHLEY.
A Match in the Dark

By T. W. SPEIGHT.
The Mysteries of Heron Dyke
The Golden Hoop

By R. A. STERNDALE.
The Afghan Knife

By R. LOUIS STEVENSON.
New Arabian Nights
Prince Otto

By BERTHA THOMAS.
Cressida
Proud Maisie
The Violin Player

By W. MOY THOMAS.
A Fight for Life

By WALTER THORNBURY.
Tales for the Marines
Old Stories Re-told

By T. ADOLPHUS TROLLOPE.
Diamond Cut Diamond

By ANTHONY TROLLOPE.
The Way we Live Now
The American Senator
Frau Frohmann
Marion Fay
Kept in the Dark
Mr. Scarborough's Family
The Land-Leaguers
The Golden Lion of Granpere
John Caldigate

By F. ELEANOR TROLLOPE.
Like Ships upon the Sea
Anne Furness
Mabel's Progress

By J. T. TROWBRIDGE.
Farnell's Folly

By IVAN TURGENIEFF, &c.
Stories from Foreign Novelists

By MARK TWAIN.
Tom Sawyer
A Tramp Abroad
A Pleasure Trip on the Continent of Europe
The Stolen White Elephant
Huckleberry Finn
Life on the Mississippi
The Prince and the Pauper

By C. C. FRASER-TYTLER.
Mistress Judith

By J. S. WINTER.
Cavalry Life
Regimental Legends

By H. F. WOOD.
The Passenger from Scotland Yard

The above is a Selection only. The Complete List of nearly FOUR HUNDRED NOVELS will be sent free upon application.

LONDON: CHATTO & WINDUS, PICCADILLY, W.

NOW READY. Crown 8vo, cloth, price 7s. 6d.

HEALTH FOR THE PEOPLE.

By DR. ANDREW WILSON.

Reprinted from HEALTH, with Revisions.

LONDON: SAMPSON LOW, MARSTON, SEARLE, & RIVINGTON, 188, FLEET-STREET, E.C.

A WONDERFUL MEDICINE.

Beecham's Pills.

BEECHAM'S PILLS
BEECHAM'S PILLS
BEECHAM'S PILLS
BEECHAM'S PILLS
BEECHAM'S PILLS
BEECHAM'S PILLS
BEECHAM'S PILLS
BEECHAM'S PILLS
BEECHAM'S PILLS
BEECHAM'S PILLS
BEECHAM'S PILLS
BEECHAM'S PILLS

Are admitted by thousands to be worth above a Guinea a Box for Bilious and Nervous Disorders, such as Wind and Pain in the Stomach, Sick Headache, Giddiness, Fulness and Swelling after Meals, Dizziness and Drowsiness, Cold Chills, Flushings of Heat, Loss of Appetite, Shortness of Breath, Costiveness, Scurvy, Blotches on the Skin, Disturbed Sleep, Frightful Dreams, and all Nervous and Trembling Sensations, &c. The first dose will give relief in twenty minutes. This is no fiction, for they have done it in thousands of cases. Every sufferer is earnestly invited to try one box of these Pills, and they will be acknowledged to be

WORTH A GUINEA A BOX.

For Females of all ages these Pills are invaluable, as a few doses of them carry off all gross humours, *open* all obstructions, and bring about all that is required. No Female should be without them. There is no medicine to be found to equal BEECHAM'S PILLS for removing any obstruction or irregularity of the system. If taken according to the directions given with each Box they will soon restore females of all ages to sound and robust health.

For a weak stomach, impaired digestion, and all disorders of the liver they act like magic, and a few doses will be found to work wonders upon the most important organs in the human machine. They strengthen the whole muscular system, restore the long-lost complexion, bring back the keen edge of appetite, and arouse into action, with the rosebud of health, the whole physical energy of the human frame. These are facts admitted by thousands, embracing all classes of society; and one of the best guarantees to the nervous and debilitated is, BEECHAM'S PILLS have the largest sale of any Patent Medicine in the world.

Full directions are given with each box. Sold by all Druggists and Patent Medicine Dealers in the United Kingdom, in Boxes at 1s. 1½d. and 2s. 9d. each.

Printed for the Proprietor by HENDERSON & SPALDING, at 3 and 5, Marylebone-lane, Oxford-street, in the Parish of Marylebone, in the County of Middlesex, and Published by ALEXANDER P. WATT, at No. 2, Paternoster-square, London, E.C.